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LECTURES

ON THE

DISEASES OF WOMEN AND CHILDREN.

DELIVERED AT GUY'S HOSPITAL BY

DR. BLUNDELL.

Lecture XXIII.

When treating of the different varieties of polypus in the preceding Lecture, there was, gentlemen, one of rare occurrence, and which I forgot to notice, I mean the polypus which manifests itself after delivery. It sometimes happens that a polypus forms in the uterine cavity without the knowledge of the sufferer, and conception occurring, notwithstanding the presence of the polypus, both the ovum and the diseased mass grow together in the uterus. Now in some instances, at least, no ill symptoms may be observed in these cases during gestation, or at the time of delivery; but after the fœtus has been expelled, the growth may descend into the vagina, not without much pain and flooding, and there is probably some risk lest the uterus should become inverted or prolapsed. A case of this kind occurred to my predecessor Dr. Haighton, a man of solid sense and uncorrupt integrity, to whose precepts I owe much, and still more to his example. In this instance, the polypus was not brought under his notice till several days after delivery; its size was equal to that of the head of a full-grown fœtus, and by the help of the ligature, it was removed in the course of five days; the lady afterwards conceiving again, and being delivered of a large child, under the care of my friend Mr. Gaitskell, of Rotherhithe.

Chronic Inversion of the Uterus.

You will sometimes meet with cases of chronic inversion of the uterus, in their character and in their management so similar to those of polypus, that there is, perhaps, no part of the course at which they may be more properly considered than the present. Inversion of the uterus may, indeed, be occasioned from polypus, but in nineteen cases out of twenty, the disease derives from delivery both its date and its origin, the womb being inverted during the obstruction of the placenta. If a woman labour under a chronic inversion of the uterus, on relating her case, she tells you that she has been ill ever since her last delivery —that she has since been liable to large eruptions of blood—that large concretions have been discharged, and have led to a suspicion of miscarriage—but that no embryo has been seen; and that these discharges end towards the monthly period, returning every four or eight weeks. Her appearance is usually pallid and exhausted. If you examine the limbs, you find that the feet are beginning to swell, and you learn, on further inquiry, that the disease has existed, perhaps, for a term of one or two years. Meeting with symptoms like these, you may suspect, with reason, that there is an inversion of the womb; and if there is, upon examining the patient in the usual position, you will find the uterus lying in the vagina, just like a polypus; insomuch, that at first, perhaps, you suspect the disease to be an ordinary polypus: when you feel the reputed polypus, as it lies in the vagina, on placing the other hand above the symphysis pubis, and searching for the fundus of the uterus, you cannot feel it there, and placing the fore finger of the left hand in the rectum, and pressing it forward above the vaginal tumour towards the symphysis of the pubis, and with the first and second finger of the right hand urging the tumour back upon the rectum, you may, as it were, press the finger from the rectum above the head of the vagina, and satisfy yourselves that the womb is not there. Now if you have made an examination of this kind, discovering a rounded body in the vagina, and no uterus in the ordinary situation, the patient telling you that she has been liable for a year or more to monthly floodings, and all this since her last delivery, there can be little further doubt about the nature of the case.

In distinguishing an inverted uterus from polypus, it may be no small help to recollect, that a genuine polypus is totally insensible, but that a great deal of pain may be felt on constricting the ligature, if the disease is invertio uteri, and this more especially, some two or three hours after the constriction. There is, too, in some instances, a disposition to vomit.

Treatment.—As to the treatment of this disease, it has been proposed we should endeavour to stop the menorrhagic bleedings by injecting the decoction of oak bark, or the solutions of alum, zinc, iron, or the like. And I should recommend you to try what is to be done by this mode of treatment, beginning with the weaker solutions, and then gradually increasing their strength, till you have reached the saturated solution, if necessary, and throwing up the injections largely, eight or ten times in the course of the day. The practice is peculiarly important when a woman is about 42, because, if you can support her for some two or three years, till the monthly uterine action is over, the bleeding will most probably cease, and she will be no longer liable to the disease. But I will suppose, that the inversion has occurred in a woman who is much younger, naturally disposed to much of the catamenia, and with a good deal of uterine action; in such case you cannot check the bleeding, and what is then to be done? When I first entered upon the practice of obstetrics, it was supposed that these cases were desperate, and the woman was suffered to go on bleeding, month after month, till she died; but it is now a well known fact, and it is to Mr. Newnham, of Farnham, that we are mainly, if not solely, indebted for the establishment of this fact in modern practice, that the womb may be extirpated by ligature, in the same manner as a polypus; not, indeed, wholly without danger, but without that high degree of danger which makes it unjustifiable to perform the operation; nay, I may say, without such a degree of danger as precludes a fair prospect of success. Mr. Chevalier first led the way to this operation, by extirpating the inverted uterus in a patient considerably advanced in years. A case afterwards came down to Mr. Newnham, in which the woman was about twenty-six, and he applied a ligature, and extirpated the uterus, on the whole, without much difficulty. After the case of Mr. Newnham, another, which occurred at Dartford, was put under my own hands by Mr. Hurst, a respectable practitioner there; in this case, the woman had laboured under the disease for fifteen or sixteen months; if my memory serve, there had been a great deal of bleeding, and a dropsy was begun. In this woman the constitution was rather torpid, and altogether by no means unfavourable for the operation. I applied the ligature with Hunter's needle, as in the case of polypus, and in eleven days the uterus came away; it sloughed, and softened down so as not to separate bodily, in the form of uterus, and the recovery of the patient was complete. Some three or four years afterwards, I saw a friend of the patient, and I was informed that she was well in other particulars, but that she had never menstruated since the operation, and that she had occasionally a slight determination of blood to the head, now and then requiring a little precautionary depletion. It is now, I think, six or seven years since the operation, and the woman is still living and well: during the progress of the removal, not a single bad symptom occurred; nor are patients averse, in these cases, to conjugal society. When Dr. Hull, of Manchester, was in town, he told me he had removed the inverted uterus by ligature, from a woman of a very irritable system; the removal of this uterus, like a game of chess, required no little tactics, and, as symptoms urged, he was obliged to slacken or constrict the ligature at different times, until, ultimately, the entire uterus came away, and the disease received checkmate at last. Now these are the only four cases in which I have had a more immediate knowledge of the application of the ligature in the chronic inversion of the uterus, and they have all of them done well; indeed I have not heard even of any cases in which the operation has been followed by fatal consequences, though such cases must, I presume, occasionally occur.

If you ask me what is to be the result of an amenorrhœa produced in this manner, I should say, that the patient is likely to become plumper, and that there may be a determination of blood to the head, so that it may be necessary to apply glasses to the neck. If you ask me whether the removal of the uterus would destroy the sexual appetite, I should reply, that I believe not; if the ovaries are not taken away, I presume the sexual appetite does not suffer at all, nor am I sure that even the removal of these would *always* destroy it. If you ask me whether there is any risk of extra-uterine pregnancy, I should again reply, there is not; for, in the formation of an embryo, it is necessary that the male and female material should come into actual contact with each other, and this cannot be the case where the uterus has been removed.

Leucorrhœa.

Independently of any organic disease, such as scirrhus, cancer, polypus, cauliflower excrescences, or the like, women are exceedingly liable to certain discharges from the genitals, something approaching to the puriform character, but far more frequently

allied to mucus, though frequently of more aqueous consistency, and much more abundant than the healthy secretion of these parts. Of this disease I have observed, in my practice, that there are two varieties, the inflammatory, which is less frequent, and the gleety form, which is of common occurrence, not to mention another variety to be distinguished from the other two—I mean an infectious gonorrhœa.

In the gleety form of the disease, the patient, perhaps, comes to you with an appearance pale, and worn, and weary; she tells you she is very liable to coldness of the hands and feet; that she feels a perpetual fatigue; that she has scarcely any appetite; that she has a great deal of flatulency, with other symptoms of indigestion; that she has a sensation as if the interior part of her body would leave her person, with aching of the back, and bearing down, and irritation of the bladder; that she is in a high degree irritable, and susceptible, and nervous, and wretched; and that, in connexion with all this, she has the *whites*, as she terms the disease, or, to use a term less offensive to the molles auriculæ, a *weakness*, by which she understands a discharge, more or less copious, from the genitals, of a muciform character, not offensive in smell usually, but sometimes so irritating, especially if there is a neglect of cleanliness, as to give rise to excoriations of the surrounding parts. It sometimes happens, where the discharge is acrimonious, that it not only excoriates the patient herself, but may act upon her intimates; and where there has been irregularity on the part of the husband, he may fancy that he has chancre, and that he has affected his mate, as a husband once called upon me and told me his suspicions, though the subsequent progress of the disease, and the cure without mercury, clearly demonstrated the mistake. If women give suck during the time they have this *leucorrhœa*, this, it is said, has a tendency to diminish the discharge. Of this I have had no proof myself, though I am not prepared to deny it; but I think I may say, that this diminution is neither certain nor frequent. Women labouring under leucorrhœa, if the discharge be sparing, may become pregnant nevertheless, but those who labour under a copious effusion will, I think, generally remain sterile. When menstruation occurs, it is said the discharge ceases, but of this I doubt. I think it more probable that the leucorrhœa is concealed by the catamenia of red colour, which mingle with it, and that the whole together comes away from the womb as if it were merely the ordinary secretion. And thus much then respecting the history of the disease.

Treatment.—In the treatment of the disease, it is always my first object to ascertain whether the discharge from the genitals is really idiopathic, or resulting from some previous change of organisation, from polypus, for example, or scirrhus, or cancer, or the like. Now, in dubious cases, the question can be decided only by an examination carefully instituted, but in the majority of instances, such examination is not requisite; and you may be pretty certain that the disease does not arise from any of those disorganisations before considered, when the discharge is muciform, somewhat sparing, without much offensive smell, and not usually accompanied with floodings. Where there are floodings, where there is much acrimony, where there is a great abundance of the discharge, and watery and greenish, or like a wash of coffee, then you may always suspect, and with strong reason, that disorganisation is the ground-work of the disease, and that it is not, as the patient herself supposes, a simple leucorrhœa.—Even in simple leucorrhœa, the discharges may acquire an odour slightly offensive, but, when cancer exists, the discharge frequently becomes offensive in a high degree, and you must wash your hands, and repeatedly too, before you can get rid of the smell.—Again: when I have found the discharge to have no ground in disorganisation, I am further anxious to know whether it is of gleety or of inflammatory nature. Now, in the general, it may be useful to recollect that the inflammatory form is by no means common, and that the gleety variety is of very frequent occurrence. Where the discharge arises from inflammation of the vagina, there will often be swelling of the external parts, and throbbing and heat; if married, the patient suffers under intercourse, and, upon examination, the heat of the parts and tenderness will be observed. Add to this, that if the disease be of the inflammatory kind, when you begin with the astringents presently mentioned, pain will be produced, and perhaps an aggravation of symptoms. If astringents cure the disease, the probability is that the form is not inflammatory; or if it be, provided the application succeed, the nature of the disease becomes of less important inquiry—a question rather of curiosity than of practical interest. By the external swelling then, the redness, the heat, the throbbing, the tenderness, the pain on examination, and I may add, perhaps, by a tendency to puriform discharge, and the effects of astringents when tried, relieving the disease when it is of the gleety form, and aggravating it when inflammatory, you may generally decide, with tolerable certainty, whether the affection be inflammatory or not.

When I have satisfied myself that the patient labours under the gleety form of the disease, I then confide my cure principally to the astringent method. Under ordinary

management, leucorrhœa, I believe, is found to be a very intractable disease, and women may go on using these astringents, perhaps, for nine months together, and at the end of that time they may be in the same condition as when they first began. From what I have observed in my own practice, I should infer that the cure of this disease is sometimes attended with much difficulty, but this difficulty, I would fain persuade myself, arises more from the negligent and careless manner in which the local remedies are employed than from any want of effect in the astringents themselves, or from any inaptitude of the parts to recover themselves, though, in cases of long standing, it is not improbable that the vessels of the mucous membrane may become distended, and, as it were, varicose. In treating this disease by astringents, then, much care and diligence are required; indeed those astringents ought not to be used in a negligent manner, nor should the employment of them be trusted to the patient without explaining to her very fully the manner in which they are to be administered. Solutions of alum, of sulphate of zinc, of iron, decoctions of bark, or hæmatoxylin, may all be tried in their turns. In the opinion of some there is an advantage in varying your astringents, according to their effect, and when you find that one has not the desired influence in checking the discharge, let another be tried. Colourless astringents women prefer, as nature, with a view, I presume, of correcting the effects of the impurities peculiar to their sex, has given them the same fondness for cleanliness which we observe in kittens, and other playful animals, and they do not like their dresses to be stained. The astringent which I generally use is alum, and it scarcely ever fails me. Our Saxon ancestors complained, that the Danes stole away the hearts of their women by the fascinating custom of purifying their persons once in every week. For ought I know to the contrary, many an accoucheur may have made his way to fortune by a commendable attention to the neatness of a shirt-plaiting—"Sic itur adestra studium aufert Neobule Liparæi nitor Hebri." But to return.

In treating this disease, it is not only of great importance that your astringents should be varied in their kind if necessary, but moreover, that they should be altered in their strength; for if you sit down time after time, and prescribe the same solutions of the same intensity, you will most probably fail altogether in the cure. Of course the more dilute the solution the better, provided it will cure the disease; and it is better therefore to begin with the weaker intensities—say of a drachm of the alum to a pint of soft water; then of two, three, four, five, and a larger number of drachms, if necessary, till at length you obtain, and use a saturated solution, provided you find that the weaker solutions are of no avail. It is not to measure and weight that you ought to look where you are using that which you conceive has power to produce an effect, but rather to the effect itself which is produced. Now, in different females, the vagina is very various in its irritability; five times as susceptible in some females as it is in others. If you find painful effects resulting from the solution, weaken it; if those painful effects still continue for a week or a fortnight, lay it aside altogether; never use an astringent of strength greater than is necessary for the cure of the disease; try, therefore, the weaker solutions at first. If it be objected that you may do mischief to the parts in applying this powerful astringent, it may be replied that we have no proof of this, although the risk ought to make us cautious; and even if there is risk, as I presume there may be, the leucorrhœa itself does a great deal of injury to the parts too; and it is a choice of evils, whether you will incur the inconvenience which may result from the leucorrhœa, or whether you will risk the mischief which may arise from an effective attempt to cure. Be resolute, therefore, but be also cautious; always bearing in mind the salutary maxim of the now neglected ethics of antiquity—

"Est modus in rebus, sunt certi denique fines
Quos ultra citraque nequit, consistere rectum."

Again. It is of the utmost importance to your success in this method of treatment, that your patient should be provided with a proper instrument, in order to apply the wash to the inner surface of the vagina, generally the seat of the disease; for though the inner surface of the womb may, in some cases perhaps, be the source of the discharge, I presume that this is by no means common. To attempt the application of these washes by means of a small syringe, or a piece of sponge, is absurd. Arm a patient in this manner, and you may as well tell her to apply the wash to her great toe, for it is impossible by these means to bring the remedy into operation upon the parts which are affected. To use the wash effectually, the patient must place herself in the recumbent posture, with the hips raised, and the limbs a little separated, and then being provided with a long tube syringe of the capacity of five or six ounces, she may pass it, previously lubricated, sufficiently far to bring it into contact with the os uteri; and then, when it has been properly placed in this manner, she may empty the instrument into the vagina, care being taken to depress

the piston slowly and gently, so that no injury may be done to the genitals during the descent. This office should be performed, not once or twice only, but eight or ten times, or oftener, in the course of the day; indeed, the oftener it is done the better, for the application of the astringent is temporary, lasting only for a few minutes, so that repetition becomes the more necessary. Moreover, with a view of keeping the astringents in contact with the diseased parts as long as possible, I would advise the patient to retain her position after injecting the astringent; because, as long as she remains in the recumbent posture, so long a part of the injection may be expected to remain in the canal.

And thus much, then, respecting the use of the astringents in cases of leucorrhœa; if carelessly or injudiciously tried, they will not infrequently be found of small avail; but when they are varied in kind, and altered in strength—and when they are injected sufficiently far and sufficiently often, and with the caution necessary to retain the fluid as long as may be; this method of treating the disease by astringents will, in general, be found to be a most effectual remedy. Would astringents in *powder* be found to be of greater efficacy than the astringent washes, their application would be more permanent, nor would it be difficult to regulate their strength.

In leucorrhœa, while you are treating the disease locally, you are not to forget the patient's habit. In some cases, by sending her into the country, and restoring the general health, the disease may be brought at once to its close. Even in the severer cases, when recommending the topical application, I should pay great attention to the state of the constitution. In this view I should endeavour to amend the condition of the chylopoietic viscera, and more especially to increase the quantity and the quality of the secretions. To ameliorate the secretions, the blue pill may be found of benefit, being given over night, and followed by a morning laxative. In some cases, however, the quality of the secretion may be healthy enough, but the quantity is deficient; and here you may find much advantage in the use of chalybeates, stimulants, and gentle laxatives. Two grains of the sulphate of iron, with aloes and myrrh, of each eight grains, may be given daily, unless too aperient, in the form of pill, or two grains of the sulphate of iron, and three of the sulphate of quinine, may be taken daily, with as much cayenne pepper as may warm the stomach; the pilular form may be preferred; the cayenne pepper ought to be good; the softer the pill is, the better; for pills of all kinds, when indurated, may pass through the bowels unchanged, in cases in which the digestive powers are feeble. These pills may be taken about half an hour before the three principal meals; breakfast, dinner, and supper; to be taken at the hours of nine, two, and nine respectively. According to the effect produced, should be the dose of the cayenne; and the effect wanted is a little warmth of the stomach, with a little gnawing pain there. In some women, a single pill may be sufficient; in others, one, two, three, or four; and, therefore, in those cases in which much pepper is required, it is, I think, better to order pills consisting of capsicum, merely as the efficient ingredient to be taken in conjunction with the others, as need may require. In addition to these remedies, I am inclined also to recommend another of the same class, not without its benefit—I mean the white mustard seed bruised; a dessert spoonful may be taken as soon as the patient rises in the morning, and another about half an hour before dinner-time. The object of all these remedies, as I employ them at least, is to increase the quantity of the gastric secretion, and in that manner to improve the digestive powers.

Again, it is not only necessary in these cases, that you should improve the digestive apparatus as much as may be, but the patient should take a fair supply of nourishing food, not, however, in quantity sufficient to oppress the chylopoietic organs. Every five or six hours the nourishment may be administered—an interval of five or six hours being sufficient for the completion of the gastric digestion; solids are, I think, decidedly preferable to fluids in these cases, provided the patient can take them. For the same reason, agreeably to Mr. Abernethy's useful rule, I recommend the patient not to drink when taking the principal meal, as the supper or the dinner, for example; the drink ought to be taken either two hours before, or three hours after the greater meals, in order that it may not be in the stomach when the digestive process is in progress, impeding it by diluting the gastric juice. Some people, however, cannot eat without drinking; to these I would recommend the use of a quarter of a tumbler full of hot toast and water, the water being made as hot as the mouth may well bear it, for the heat may have the effect of augmenting the gastric secretion, and, in so far, it may augment the powers of the stomach. In slighter cases of dyspepsia, as I know myself from personal experience, great advantage is derived from the use of heated water at dinner, a beverage sometimes excellent for the valetudinarian, though hurtful for those in health. As to the kind of drink which the patient should take, I think that black tea is preferable to coffee or cocoa. To coffee I am rather averse; it is heating

and menorrhagic. Ale, wine, porter, and spirits, should be made the subject of careful trial. Bottled porter in a state of effervescence, when it does not disorder the stomach, seems to support the system, as I have had occasion to observe, where women have been suckling. Wines are apt to become acescent, and therefore I prefer a moderate quantity of diluted spirit, which, without sugar, is not prone to acidity; two or three parts water may be added to one of spirit. Half an ounce or an ounce of rum or brandy may be taken in the course of the four-and-twenty hours; the quantity should never be increased without good cause, and ought always to be measured out in a small measure kept for the purpose, and the bottle containing the spirits should be afterwards locked up, for we must not endanger the life and health of our nurses. (Laughter.) When two pints of water are mixed with one part of the spirit, the whole, though fiery, becomes weaker than port-wine; for, I believe I am right in asserting, that every glass of port-wine, of which some ladies unadvisedly drink a pernicious quantity, is equivalent in strength to more than one-third of a glass of brandy; a fact, gentlemen, which I recommend you to remember next time when you take your seat at the dinner table.

There is another point of regimen which requires attention in the treatment of these women, and that is the air. It is of great importance when a woman is in town, and labouring under this disease, that the air should be changed, and that she should go down into the country, to the sea-side or to some of our watering-places. I believe the mere change of air, independently of a better quality of atmosphere, is of no small advantage, and paradoxical as it may appear, by changing the air for the worse, we may sometimes change it for the better. The more the patients are in the open air, the better; they cannot take too much exercise in the open air, provided they do not suffer in consequence fatigue, distress, or pain, or freezing; and though much exercise cannot be borne at first, yet by accustoming themselves to it day after day, they may learn at length to bear it with alacrity. Man seems to have been originally formed for the air: you are aware that apes and baboons, and all those animals which bear a great and humiliating resemblance to mankind in structure, are passing their lives on trees and fields; and I would say of man himself, that he is a *field animal*, and that when he makes himself a citizen, he is getting out of his element; to become very politic, and very knowing, and very wealthy, and very care-worn, and very miserable; for the apple of knowledge, he again dearly pays; and hence one principal cause of many diseases with which you are meeting in large cities, which are not to be met with equally in the country; and hence many persons are improved immediately and surprisingly by rustication while living in town; they get into the situation for which the Creator of nature designed them, and for which, I have no doubt, that the different parts of their body are best fitted, and they begin to think that there is some truth in the tradition, and that man may find his best pleasure in a garden after all.

There are certain medicines which I would recommend to you in cases of leucorrhœa, and which I must not pass without notice, though, except in slight cases, much good is not, I believe, to be derived from them. *Copaiva, balsam, compound tincture of benzoin and cubebs*, are the principal. I would advise you to administer them according to the effect produced. A pretty full dose of the copaiva, I conceive to be about 4 drachms, in the course of the day; of the compound tincture of benzoin an ounce, and one or two ounces of the cubebs, daily more or less according to the effect produced.

Much bed is not good in leucorrhœa. Much dissipation and much devotion, large parties, divine operas, polemical caudle, and densely crowded galleries in dissenting chapels, are surely hurtful. Indeed, when patients labour under relaxing cachexia, without organic disease, they ought carefully to review their whole regimen, and confess themselves to their physician, that they may take his counsels respecting it. In such cases, the state of the chylopoietic viscera is every thing.

FOREIGN DEPARTMENT.

M. BROUSSAIS.

We are glad to see, that the gastro-enteritido mania of our neighbours is at last gradually subsiding; indeed, whatever share M. Broussais' arrogance * may have had in securing to his doctrine the extraordinary applause it met with, this was, we apprehend, still more owing to the commodiousness of his principles. How could it be otherwise than acceptable to many, at once to render unnecessary the study of pathology and thera-

* In the preface to the second edition, he modestly observes, that he considers his theory at least as valuable an acquisition to mankind, as the discovery of the cow-pox!

peutics, by proclaiming gastro-enteritis to be the only disease, and the application of leeches as the only remedy.

Our readers will be greatly amused by a description of the manner in which the medical practice is carried on at the Hôpital Val de Grace; taken from the inaugural dissertation of a young physician who attended there as a pupil.

"When I," he says, "was appointed one of the dressers at the hospital, I had but a very incorrect notion of the 'doctrine physiologique.' It having, in this capacity, become my duty to examine and prescribe for the patients, who had been admitted after the regular morning visit of the physician, I was not a little uneasy at my responsibility, until one of my colleagues set my mind perfectly at ease, by the manner in which he managed the affair. The only thing was to ask how many new patients there were in attendance, and then to order a sufficient number of leeches, to allow thirty for each patient. Thus armed he went through his wards, where he had only the trouble of applying his leeches either to the abdomen or to the anus, an alternative which had already been settled by the 'infirmier,' who asked each patient at his entrance, whether he had diarrhœa or pain in the abdomen, and in the former case, placed a piece of oil-cloth between the legs, in the latter, over the abdomen; by these symbols, the young practitioner knew at once where to apply his thirty leeches, whether to the anus or abdomen, and, indeed, he hardly ever had to complain of incorrectness in the 'infirmier's' diagnosis and plan of treatment."

ON SUICIDE.

Extracted from a Treatise of Dr. HEYFELDER, *of Trieve.*

In order to ascertain whether an individual has been murdered, or committed suicide, it is very often of great importance to observe the place and posture in which the body is found, and the manner in which the wounds seem to have been inflicted. Persons who destroy themselves, except when under the influence of fanaticism or derangement of mind, generally select a certain and easy manner of death, provided time and circumstances throw no obstacle in their way. Females seem to have a predilection for such kinds of suicide as do not require long preparation or great violence; they generally kill themselves by leaping from a great height, by drowning, poisoning, &c. Several diseases appear to cause an inclination to suicide. Esquiro and Osiander especially mention scrofula, affections of the genitals, organic diseases of the heart, chronic enteritis, &c. According to Esquirol, suicide is most frequent between the age of twenty and thirty. Amongst the remarkable cases of suicide related by our author, we mention that of a female about thirty years of age, who killed herself by applying two hundred leeches to the abdomen; the pain which they caused became at last so violent, that she was obliged to call for assistance: she died, however, from depletion. In another instance, a woman, who had determined to kill herself, went near a bee-hive and irritated the bees, which instantly fell upon her, and stung her in the most shocking manner; she was carried to the Charité at Paris, but died in spite of any thing that could be done.

Persons who are found suspended, have the presumption of suicide against them, as this manner of death will hardly ever be inflicted by others; not unfrequently, however, the bodies of murdered persons have been hung up, to make it appear that suicide has been committed. In such cases, the presence or absence of the signs of apoplexy or suffocation, and the ecchymosis round the neck, must especially be attended to; they afford, however, no decisive proof for or against strangulation, there being numerous observations on record where suicide had actually been committed by hanging, and yet the brain and lungs were found bloodless, and there was no ecchymosis from the chord round the neck. Rupture of the cartilages and ligaments of the larynx and os hyoides, as well as dislocation or fracture of the cervical vertebræ, afford no proof of murder having been committed; the case of a robust man is mentioned, who hung himself, and in whom the larynx was greatly lacerated, and a vertebra fractured. In most cases of strangulation, apoplexy of the cerebellum is produced, which, according to Gall and Serres, is always accompanied by morbid erection of the penis, the effusion of seminal fluid, and ecchymosis of the scrotum: in females, the uterus and vagina are filled with blood and mucus.

EXPERIMENTS ON CIRCULATION IN LOWER ANIMALS.*

Dr. Carus has lately made some very interesting experiments, in order to ascertain how far the circulation of lower animals, especially of gasteropoda and crustacea is influenced by external agencies, such as heat, galvanism, &c., and by the nervous system.

* Dr. C. S. Carus, Darstellung, v. d. aeuss. Lebens, bedingungen d. weiss u. kaltblüt Thiere.

The quantity of blood in snails (helix pomatia) was found to vary considerably, according to the weather and the degree of moisture of the soil. After a long drought, not more than five or six drops of blood could be collected, while in rainy weather, and in a moist soil, the average quantity is at least twenty. In the former case the pulsations of the heart are very slow, about 18 or 20 in a minute, and it seems, on the whole, as if the animal were in an incipient state of torpidity.

The blood of the snail consists, for the greatest part, of water and lime;* it is of a whitish blue colour, venous consistence, and slight alcaline taste; after two or three minutes it congulates, and separates into cruor and serum, the former being double the quantity of the latter. The globules were very distinctly seen under a microscope, which magnified 34 times; they are perfectly circular, without any nucleus, but of various sizes, apparently in small quantity, and are not found in the serum.

The heart of a helix pomatia being laid bare, by removing the two largest windings of the shell, was found to make between 30 and 35 pulsations in a minute; when it was exposed to the direct rays of the sun this number increased to 39; by dividing the cerebral ganglion from the nervous chord, the frequency was not changed, but at every 6th or 7th pulsation there was an intermission of two or three; after five minutes the heart ceased to act, but on the application of common salt, or by pricking it with a needle, the contractions again occurred for about ten minutes, after which time its irritability was completely extinct.

The heart of another animal, of the same kind, pulsated only 28 times in a minute; but when a ligature had been placed round the neck more frequently, though with an intermission at each sixth or seventh contraction. On removing the head, and part of the viscera, the heart continued to act as before, and when exposed to strong concentrated light, its pulsations even increased to 50 in a minute. After eight minutes it was taken out, and still pulsated 28 times, which, under the action of strong light, suddenly increased to 60. After 14 minutes it seemed insensible to any stimulus.

On dividing the vein leading to the auricle, the motion of the heart continued as before; being completely separated from the body, the pulsations became intermittent, and after about ten minutes ceased entirely; under the action of a galvanic battery, however, the contractions were reproduced, and could be kept up for more than an hour.

* According to Erman, it exhibits also traces of iron and magnesium.

In a craw-fish (astacus fluviatilis) of half an ounce weight, the heart pulsated 49 times in a minute, and being opened emitted about 18 drops of blood, which, in consistence, colour, and taste, resembled that of the snail. It was found to contain less lime, but to congulate much quicker under the microscope; the globules appeared also of various sizes, but in much greater quantity and with a dense nucleus.

The heart of a craw-fish, which, in its natural situation, beat 46 times, being separated from the body, ceased to act after five minutes. Concentrated light and galvanism seemed to revive its action, but in a much slighter degree than in the isolated heart of the snail.

On removing the head of a craw-fish, the frequency of the pulsations remained the same, but there was an evident intermission. Destruction of the first ganglion was followed by immediate interrruption of the pulsations; within a few seconds, however, they reappeared, although very irregular and slow, not above 20 in a minute. Whenever the heart was brought under the action of the galvanic battery, it strongly contracted, even after having been for a long time insensible to other stimuli.

REMARKABLE CASE OF CATARACT.

In the Swedish journal, "Arsberättelse om Svenska Läkare Sällskapets Arbeten," of 1827, the following singular case is related by Dr. Wendelström: a robust peasant, about sixty years of age, whose eyesight had always been very good, and who had never suffered from any complaint except slight attacks of gout, while occupied in felling wood in a forest, felt a dimness of sight, which gradually increased, and within a few hours terminated in such complete blindness, that he was obliged to be led home. He had not the slightest pain, nor could any external sign of inflammation be discovered; but when Dr. Wendelström, a few days afterwards, examined him, he found both eyes affected with cataracts, which were subsequently removed by extraction.

SUCCESSFUL TREATMENT OF UNUNITED FRACTURE BY SETON.

The history of this case is contained in the report of the Medico-Surgical Institution at Magdeburg. Jos. Roebel, ætat. 24, of a very healthy constitution, having, on the 20th of January, 1826, broken his thigh-bone, was, for ten weeks, under the care of a country surgeon; but, at the end of that period, it was found that the fracture had not united, and that there existed a preternatural inability between the two ends of the bone. After the unsuccessful employment

of a great number of remedies, he was, in September, admitted under the care of Dr. Dohldorf. The left thigh was not emaciated, and very little shorter than the right; when the patient was standing upright, the limb was bent inward; the fracture was nearly in the middle of the bone; the ends of which were not enlarged, and seemed to have no union whatever, for the lower part of the limb could be moved in all directions without any difficulty or production of pain; the general health of the patient was very good; and it being found, after an accurate examination, that the repeated and continued application of bandages and splints were without any effect, the introduction of a seton between the two ends of the bone was decided upon. The operation, which was performed on the 3d of October, was followed by a considerable degree of inflammation, so that it was found necessary to remove the seton on the 11th; suppuration was very profuse, and a great many fistulous abscesses formed between the muscles, so that the success of the operation, and even the life of the patient, was despaired of; at the end of a month, however, reunion of the fracture began to take place; the wound from the operation, and the abscesses, healed, and, at the end of December, a very firm callus had formed; the deposition of bony matter, which, from this period, became too copious, was diminished by compression; and, at the beginning of May, both limbs were of equal length, and, except a slight muscular weakness in the left leg, the patient was discharged perfectly cured.

RESEARCHES ON THE ANATOMY OF THE BRAIN.

By Dr. Foville, *Principal Physician of the Lunatic Asylum for the Department of the Lower Seine, &c.; to which is prefixed,* M. De Blainville's *Report on the Subject to the Royal Academy of Sciences.*

[The following papers appear in The Philosophical Magazine for the present month, to which publication they have been sent by a friend of Dr. Foville. No part of the papers have, as yet, been published in France.]

The Academy, at its meeting of the 24th of March last, referred to us for examination, a memoir presented to it by Dr. Foville, who was long attached to the service of the hospitals of Paris, and who is now chief physician to the Lunatic Asylum at Rouen. The researches contained in this memoir relate to the anatomy of the brain of man only; they are not extended to the most nearly related species, and of course do not notice the inferior divisions of the osteozoa.

The study of the composition and arrangement of the central part of the nervous system, that is, of the spinal chord and brain of man has, at every period in which anatomy has been at all minutely cultivated, necessarily arrested the attention of the most celebrated anatomists. We learn this from the history of anatomical science from the time of the school of Alexandria, down to Gall and Spurzheim, who, in our day, have given to this kind of research an impulse and direction altogether new.

In this part of our structure, it is not surgical anatomy with which we have to do. Hitherto the bold hands of our most distinguished surgeons have not ventured to carry the scalpel into parts so delicate, and possessing so intimate a connexion with the continuation of life. It is a higher description of anatomy:—it is physiological anatomy, of a nature necessarily somewhat speculative, which must direct the knife. Not that it is to endeavour to resolve questions inaccessible to human reason, such as, Where is the seat of the soul? What is its mode of action? and What is the relation which it bears to material substance?—but we must see if it be possible, by analysis, to discover what parts are particularly connected with the intellectual faculties, what with the senses, and what are connected with motion.

To resolve, or at least to throw light on, these great questions, of the difficulty of which we are, perhaps, not even now sufficiently aware, various means have been employed, according to the different manner in which the subject has been considered; and also according to the progress of biology, or the science of life.

The first method which offers itself, and that which in fact has been followed by most anatomists, is to examine the organ by itself, in the human subject, in its healthy state, and when arrived at its full development. But it was necessary to effect something more than a superficial examination of the form and proportion of the parts, and to penetrate into the interior more completely than could be done by merely making different horizontal and vertical sections, as was generally the practice before the time of Gall and Spurzheim. It was not with the brain and spinal marrow, as with the other organs, that a simple surgical anatomy was required. This would be all but useless, since it scarcely ever happens that an operation is required to be performed on these parts.

A second method, which it will be conceived possessed a superior degree of influence on our knowledge of the mysterious seat of our faculties, consisted in embracing the opportunity which design or accident afforded for comparing the cerebro-spinal system of man with that of the animals the most nearly related to him.

Although in this method, in common with the preceding, the examination was superficial, and limited to the form and proportion of the parts, it necessarily led to the assigning of particular functions to at least some of the parts of the organ, the coincidence being observed between the intellectual peculiarities of this or that animal, and the development of this or that part of its nervous system. Errors would necessarily be committed; but it is evident that by this means, after a greater or less number of unsuccessful attempts, some certain results might be obtained.

A third method soon presented itself to the biologist—one which could not fail to be of much greater importance and value in relation to the physiological anatomy of the brain. It consists in carefully studying the connexion between the more or less chronic morbid alterations of this central and essential part of the nervous system, and the functions of the intellect, of general or special sensibility, and of locomotion, in order to advance from functions to organs; since it was impossible, from the organs, to infer their functions. But, in order properly to employ this method, it was necessary, as will be readily perceived, that the healthy or regular state of the organ should be exactly determined, as well as the variations to which it is liable, both as a whole and in its parts according to age, sex, temperament, individual peculiarity, or *variety of race*, and this not with respect to form only, but with relation also to intimate structure. Thus we are brought back to the necessity of perfecting the first method.

This step was still more necessary to regulate the use of a fourth, and much more difficult, method, namely, that of experiments consisting of operations, by which, in general, the parts are more or less suddenly altered, a method which is liable to be still more deceptive in this than in any other branch of physiology; hence the very contradictory opinions which we find adopted by experimental physiologists. In fact, when we reflect that the parts of the brain are neither limited nor perfectly circumscribed; that in wounding or removing these parts with the bistoury we do not see what we are touching; that the action is immediate, violent, and sudden; that the consequent disturbance of function in the living animal being complex, cannot be the faithful and certain interpreter of the injury,—we may conceive how difficult is the application of this mode of arriving at the true knowledge of the functions of the centre of the nervous system, however skilful and well-practised the hands of the experimenter may be.

These observations are also, to a certain degree, applicable to the method of employing medicinal substances for the purpose of experiments on the nervous system, whatever be the mode in which they may be introduced into the animal economy. We see, indeed, that after such an application, a particular phenomenon is produced, and that a particular change takes place in a particular faculty. But, first, the phenomenon is often a complicated one; and, secondly, it is very rarely, if ever, possible to discover the part or organ which has been affected. Hence the difficulty of ascertaining, by this method, the special functions of the particular parts of the nervous system.

As to the method, which consists in studying the nervous system in its progressive development, from the moment at which it first becomes perceptible to our senses, until its formation is complete, and thence through all its changes, as the animal arrives at its full maturity and afterwards descends to a senile death, and in analysing the corresponding progress in the growth and the decline of the intellectual, sentient, and locomotive functions;—this is evidently a more solid and an easier method, because it is anatomical. But it stands in the closest relation to the first method.

Next, and lastly, I shall speak of the fifth, or metaphysical method; since, in fact, it is the most modern, and that which evidently has led Drs. Gall and Spurzheim to their mode of viewing the anatomical conformation of the nervous system.

It is not difficult to conceive the possibility of analysing, *a priori*, all the functions of the intellect, of sensibility, and of locomotion; of systematising them, and of subsequently seeking, in the organised structure, a corresponding arrangement. It is this new direction which has diverted anatomists from the beaten track to which they had attached themselves before the labours of Gall and Spurzheim. Had Gall and Spurzheim done nothing but this, and moreover, were all the points of their anatomy to be successively contested and completely refuted, there would still remain to them the honour of having discovered a new impulse, and consequently to them must be referred, as to its source, all that may be valuable in future labours on this subject.

From this preliminary analysis of the means which may be employed to enable us to form some conception of the physiology

of the brain, it is evident that the chief and most important one, and that without which all the others must fundamentally err and be devoid of all certainty, is the minute internal, as well as superficial, anatomy of the human brain, in its adult, perfect, and healthy state. Without this point to start from, all must be precarious. It is the rule by which all the rest must be measured. How, in fact, shall we be able to say, whether a particular morbid symptom corresponds or not with a particular alteration in the development or structure of a certain part of the brain, if the healthy state of that part is not accurately known, and if, further, we are ignorant of the limits to the variations of which that part is susceptible? Can it be possible to point out the steps of degradation in the scale of animals, with respect to this most important part of the organization, if the point whence we are to set out has not been justly established? How shall we be able to draw a conclusion respecting the use of a part, from experiments made on animals, in which we are not sure that the part in question exists?

We do not hesitate, therefore, to assert, that notwithstanding the works of greater or less importance which (with more or less candour and accuracy) have within a few years been published by anatomists of all the nations of Europe, the cerebro-spinal nervous system is a field in which there still remains to be made, not a scanty gleaning but an ample harvest. But, for this purpose, it is essential that our researches should be directed to the human subject. It is in our own species alone that we can analyse the functions allotted to the nervous system—man almost exclusively being subject to those diseases and alterations of the brain, of which the effects can be appreciated by comparison. It is then a happy omen for the work of Dr. Foville, to observe, that his researches on the brain have commenced with the adult healthy brain of man. In order that his labours may be justly appreciated, we beg leave, before stating our analysis of them, to offer to the Academy a summary sketch of our present knowledge in this branch.

We shall not go further back than to the labours of Drs. Gall and Spurzheim, since to do so would be of no use on the present occasion. Besides, this analysis has already been made, and, indeed, often with that rigorous justice which tends rather to rob a living discoverer than to enrich his predecessor.

It will doubtless be recollected, that Gall and Spurzheim regard the spinal chord as consisting of ganglia, or masses of grey substance which they call nervous matter, corresponding in number to the principal vertebræ, and giving rise to the spinal nerves, which, in their size, bear a proportion to the ganglia. Thus with them the superior bulbous extremity of the spinal chord is one of these ganglia giving origin to all the sensorial nerves, and also to two bundles of fibres, of which the upper, the corpus rectiforme, goes to form the cerebellum; and the inferior, the corpus pyramidale, the cerebrum. For this purpose these bundles are augmented by new fibres, which take their origin in the grey matter constituting the corpus dentatum or rhomboideum, for the cerebellum; and successively in the locus niger of Soëmmering, in the crus cerebri, in the thalamus opticus, and in the corpus striatum for the cerebrum. These are what they call the ganglia of reinforcement.

The numerous nerves which form the crura cerebri and cerebelli (and which they consider as being not less special with respect to the different parts of the hemispheres than the nerves belonging to the organs of the external senses are to them) are continued to the internal surface of the folded or convoluted membrane constituting the hemispheres of the cerebrum and cerebellum, and which is covered on its external surface with a layer of cineritious matter. From this latter substance arise other white or nervous fibres, which, differing from those before mentioned, pass from the circumference to the centre, and uniting with their fellows, on the median line, form for the cerebellum the pons Varolii; and for the brain the corpus callosum. These are the parts which Gall and Spurzheim call the commissures of the hemispheres in these organs.

One of us (Ducrotay de Blainville) has admitted in his general considerations on the nervous system, that the spinal chord is composed of two lateral columns, each of which consists of a principal part formed of white substance, and of grey matter, apparently internal, and of three longitudinal bundles: one anterior or inferior, and two posterior or superior; of which one is deep, the other superficial. He has also stated that these two columns are united together anteriorly by a commissure of grey, and posteriorly by a commissure of white substance.

The views of Blainville differ from those of Gall and Spurzheim in this; that he regards the spinal chord as continuous with all the parts of the brain, which organ he divides into a central part, and a ganglionic part with or without external apparatus. He considers that the central part begins to divide into two parts, where the fourth ventricle is formed by the separation of the two superficial posterior bundles, as they proceed onwards to the crura cerebri, which they contribute to form. The result of this

he considers to be the uncovering or exposure of the internal cineritious matter, and the formation of the thalami and corpora striata, if these bodies are not rather to be looked upon as true cerebral convolutions. The larger fasciculi of the chord, or those in which the cineritious matter is lodged, directing themselves to the right and left as they advance to the formation of the crura. He even traces the central cineritious substance into the eminentiæ mammillares, and into the substance which closes the third ventricle anteriorly (the infundibulum). He traces this ventricle from its commencement at the pituitary gland, following it to the right and left into the lateral ventricles, and through the aquæductus Sylvii, or iter a tertio ad quartum ventriculum, into the fourth ventricle, and finally through the whole length of the spinal marrow.

Examining next the ganglia without external apparatus; namely, the olfactory lobes, the hemispheres, the tubercula quadrigemina, the pineal gland, and the cerebellum—he considers that each of these parts communicates more or less intimately with the central part to which it is attached through its peduncle or origin, consisting of ascending and descending fasciculi of fibres. He likewise considers that each lateral portion communicates with its fellow by a transverse commissure of medullary matter, that for the hemispheres being the corpus callosum, and that for the cerebellum being the pons Varolii.

He considers that the nerves which are called cerebral nerves communicate with the cephalic portion of the medulla, in the same manner as the spinal nerves do with the spinal portion, by means of two orders of fibrillæ, the one anterior, the other posterior; so that according to his view there are in the head only so many pairs of nerves as there are vertebræ, that is to say, that there are four.

Dr. Rolando, before the last of the authors whom we have cited, and as he himself asserts, before the first of them, had exposed the structure of the brain in a manner which it will be proper shortly to describe. His views, which it is not easy to understand, appear to us in many points to resemble those of Drs. Gall and Spurzheim. According to Rolando, the hemispheres are composed of numerous fibres, which, proceeding from their crura, ascend and diverge as they traverse a part of the cineritious matter composing the corpora striata. These fibres partly disperse themselves into the medullary matter composing the corpus callosum, the fornix, and the septum lucidum; whence on all sides medullary matter is spread in an extremely thinly extended form over that part of the corpora striata which projects into the ventricles; whilst another portion of the fibres turning backwards forms the two posterior pillars of the fornix, the cornu, the cornua Ammonis, and the tails or narrow posterior extremities of the corpora striata. Whence it appears to him, that there are, in fact, no corpora striata, or thalami optici, properly so called, but that these prominences are formed by the interlacing and passage—1st., of the superior fibres of the crura cerebri; 2ndly, of those which appear to come from the hemispheres, and to be in relation with the corpora quadrigemina; and, lastly, in the third place, of those which pass transversely, ascending and spreading themselves in the form of a membrane over the thalami optici in the direction from within outwards, and which, afterwards uniting into a chord, pass round the crura cerebri, and having decussated, constitute the optic nerves.

We thought it required of us to give this exposition of the principal methods which have of late been proposed to make known the structure of the brain.

Memoir of Dr. Foville on the Anatomy of the Brain.

Gentlemen,—During six years in which I was connected with the medical service of the hospitals of Paris, I had the privilege of being placed in immediate relation with those whose labours on the subject of the diseases of the brain have mainly contributed to the advancement of this branch of science. I endenvoured to profit by the advantages of my position, by imbibing their observations, and making myself master of their doctrines.

For this object it was most essential to have recourse to that foundation without which all medical theories vacillate on the brink of annihilation,—on anatomy, which has ever been most in arrear in that which relates to the structure of the brain.

It is true that very important observations had been made respecting the general development of the nervous system, and on its gradual complication in the scale of animals; and that anatomists are pretty well agreed as to its general composition. We are nevertheless ignorant of the structure of its principal parts; and the most widely received opinions with respect to them, are perhaps nothing more than ingenious hypotheses, which accurate observation may overthrow.

I saw that it was necessary that I should examine for myself. The first object of my researches was to verify accredited theories. Their first result was to inspire me with doubt respecting the validity of those theories. In the course of these researches I was struck with certain constant dispositions in the cerebral organisation, which appeared to me to have been hitherto unnoticed. I

multiplied my observations, and found that the facility of making them was increased by daily practice; and I soon became sufficiently familiar with the details of structure which I had noticed, to be able clearly to demonstrate them.

It is three years since I laid before my preceptors and colleagues, for their opinion, the anatomical preparations of the brain, which I made in their presence. I was animated by the confidence which their united approbation excited.

About the same time I had the opportunity of soliciting the judgment of those whose whole career had been devoted to the study of this subject; and if they were not all decided in favour of my views, by the greater number, the preparations on which these views were founded were considered to be conclusive.

My Essay was presented to the Academy of Medicine; but in consequence of the death of Professor Beclard, who was appointed the reporter, the judgment of that learned society has, down to the present time, been suspended. Notwithstanding, the Academy of Medicine condescended, not long after, to award its prize to an extensive Essay on the functions and diseases of the nervous system, of which Essay my anatomical researches formed a part.

Although since that period I have been removed from the capital in order to take the charge of the medical department of the noble institution for the insane at Rouen, I have not ceased to pursue my anatomical researches, which I am now occupied in describing.

Before sending my work to the press, the greatest favour to which I can aspire, and the most imposing title which I can covet as a claim to the confidence of the public, is, unquestionably, the favourable decision of the Academy of Sciences. With the hope that the Academy will grant a few moments to the examination of my observations, I have requested to be allowed the honour of reading a summary of the facts which I flatter myself that I have proved.

Laying aside the historical examination of the subject, and taking up the science at the point to which I find it at present advanced, I shall in the first place say a few words respecting the spinal marrow, and shall afterwards describe, in succession, what I have observed in the organisation of the cerebellum, in the crura cerebri, in their expansion in the corpora striati, and thalami nervorum opticorum; and, finally, I shall speak of the organisation of the brain itself, and of its principal parts.

To these anatomical data I shall subjoin such physiological and pathological considerations as the subjects may elicit.

(To be continued.)

BRANDE'S QUARTERLY JOURNAL.

(Concluded.)

The qualities of a man, say the philosophers of the *beau monde*, are to be guessed from his bow; and if the same rule, with a little inversion, hold good amongst philosophers of another kind, the title of Mr. Meikle's paper (page 56) will go far towards settling the merits of the paper itself. We justify our remark by extracting it. It professes to consist of remarks "*On the relation between the Density, Pressure, and Temperature of Air; and on Experiments regarding the Theory of Clouds, Rain, &c., with a Conjecture about Thunder and Lightning.*" The first of the three sentences is well enough, but the expression "on experiments regarding the theory," comes in a very questionable shape, and the "conjecture ABOUT thunder and lightning" presents as curious a heading for a paper written by a philosopher of a certain degree of note in the nineteenth century, as can well be met with in the whole five-and-twenty volumes of Mr. Brande's Journal. It would be harsh, perhaps, to pour the whole wrath of Lindley Murray and Dr. Blair upon so humble an occasion as this, especially as information, not criticism, is our object; but it is difficult to pass such an unphilosophic mould as that in which this "conjecture about thunder and lightning" was formed, without a word. There is something, too, to be learned, even from the slips of philosophers; and when we know that there is no species of writing so favourable to a clear and elegant style as that in which science requires to be communicated, errors in that style present so much the greater prominence to the eye. Correct language, and a just mode of expression, are not less important to the objects of philosophy, than the knowledge which its language is intended to impart. No man ever felt the truth of this more forcibly than Professor Playfair, whose writings we may instance as a model of clear, concise, and elegant composition.

Mr. Meikle, however, ought to have all the benefit of his conjecture which we can give him:—"The conjecture which I have to throw out is, that when a large mass of warm damp air is suddenly moved upward, it dilates, is cooled, and deposits a considerable share of its moisture, which, in laying aside the gaseous form, parts with electricity, and emits lightning. The sound may be partly a tremor, which the air sustains at the moment the pressure is relaxed by the vapour losing the elastic form, and may be partly an effect of the electricity in

making its escape from the cloud. The thunder and lightning which sometimes attend the condensation of large volumes of steam emitted by volcanoes, are favourable to this theory, as are likewise the noise and lightning of the water-spout, if not some parts of the northern lights." The reasoning from which this theory is deduced, occupies too formidable a space in the original, to allow of its condensation; but the account of an experiment upon which Mr. Meikle founds his "theory of rain and clouds," as it is not long, presents the gist of his arguments, and is very plausible, we shall extract. Mr. Meikle considers, that if by any means you dilate or expand a given body of air which contains moisture, the temperature of that air is lowered, and the moisture is deposited. This deposition of moisture in the natural world constitutes clouds or rain. Thus, a mass of air, well saturated with moisture, may rest near the surface of the earth, and exhibit no particular phenomena. If by some cause it rises, and gets into a colder atmosphere, it dilates; its temperature is lowered, and the moisture either descends in drops, or unites and forms a cloud. "The following simple experiment affords a more direct proof, that sufficient rarefaction will always change common undried air into a cloud, or, if very moist, into rain. Connect a small glass flask, containing moist air, with the receiver of an air-pump, by means of an intervening stop-cock; shut the cock and exhaust the receiver; look attentively at the flask; open the cock; the air in the flask will be immediately rarefied, and a momentary mistiness will be perceived in the flask; this is moisture condensed into a cloud by the cold caused by rarefaction. A cloud which is visible in so small a quantity, would be pretty dense on a large scale. I have never tried this experiment without succeeding; but I believe it may fail, if the air contains but little moisture, the receiver is very small, or the stop-cock has a very narrow bore." If these disadvantages do not occur, the experiment may be renewed twenty times with but one exhaustion of the receiver.

En passant we may notice, that Mr. Meikle and Mr. Ivory cannot agree. They are like the rest of the world; but whether it be in the fields at Battersea, or at the back of Gower Street, in Ambrose's parlour, or in the philosophical magazines, it is refreshing now and then to look on, and see who has the best of it.

It does not seem of much practical consequence of what our mineral waters are composed, for we have gone on with them hitherto, content with analyses of the most wretched kind, if the latest analyses of some of them be correct. What a singular variation from the truth did the supposed contents of the Malvern waters, for instance, present till within the last year or two.* The Bath water has been subjected to a new analysis by Mr. Walcker, (page 78,) and not before it needed it. Its constituents prove to be chlorine, sulphuric acid, carbonic acid, potassa, soda, lime, magnesia, oxide of iron, alumina, and silica. Besides these, the mineral water contains some extractive matter, its residue, when evaporated, being coloured, and containing an admixture of carbon after ignition. The chemist, after casting his eye across this list, may be induced, perhaps, to suspect some of the old analyses of mineral waters. There is the result of some other examinations of obscure springs, page 89.

How *important* a document to Mr. Baily, is the *anonymous* letter, page 90!

Making our notes in the order in which the papers stand, they would next form—a notice of an abstract of a review of a translation of a French Essay, by M. De Jonnes, on the Effect which Forests have upon Climate,—involving, from first to last, the errors of three languages; for, while the essay is French, the translation and the review are German, and the abstract is English. By this time the contents have been filtered too many times to be worth having. The original essay argues that woods have a very considerable effect upon climate, by lowering the temperature, and increasing the humidity; the essay is the result of considerable excitement on the subject in the Netherlands, where the topic is looked on as very important; this is as much as we can venture to think of saying upon the article.

A "curious phenomenon," which presented itself to the eyes of Mr. Octavius Morgan, on a visit to Vesuvius, during a violent eruption and storm, consisting of a phosphorescent glory around the upper extremities of his friends' garments, is not sufficiently uncommon for extraction.

By far the most valuable paper in the journal is near the close of it, and has been transmitted from America by Professor Bonnycastle, whose election to the mathematical chair at Virginia was a high, though perhaps an unavoidable, compliment to the talent of this country. It extends to above twenty pages; but instead of attempting a condensation, we shall

* See Mr. Addison's Essay on the Mineral Water of Great Malvern, &c., a book worth the perusal of those whose complaints carry them to the pump-room.

merely state its object, with this observation, that it places the phenomena of electricity in such a position, as to demand an attentive perusal on the part of all those whose pursuits lead them to the study of that branch of philosophy. "If the view I have taken be correct," says the Professor, "it follows that electricity, galvanism, and magnetism, are *radiant fluids*; that they are caused to radiate *by heat*, and commence at a fixed temperature, which is precisely that *at which light itself is first given off in abundance*." To this we add one observation. Mr. Bonnycastle's experiments decidedly confirm the fact, that the difficulties which sometimes occur in obtaining the full effect of electrical experiments, are not to be ascribed to the causes to which they are repeatedly referred at our lecture tables—a moist state of the atmosphere. Take a specimen of what constantly occurs. Every possible care is taken to keep the apparatus in a warm, dry room, previous to use; it acts very perfectly in the morning; it is brought at night into a room filled with people; the electrical machine is worked in vain; the jars refuse to be charged; the electrophorus is useless; the curator of apparatus wears his silk handkerchief to a rag, with rubbing the cylinder of the machine, to counteract the effect of "the damp state of the room," and keep it dry; he polishes the jars, he scours the instruments, the lecturer is perplexed, and, at length, overcome by the obstinacy with which the moisture arising from a large audience *will* settle on the apparatus, gives it up in despair, and is content with slight shocks, in place of the powerful effects he is anxious to produce. It is sufficient for us to refer those who have been thus mortified to this paper, for an explanation of the real cause of the phenomenon, making the following extract of Experiment 7, page 137:—

"Robison and others have explained the depriving power of points" when presented to an electrified body, by referring it "to a stream of electrified air which they maintain. To discover whether the depriving power of flame might be produced in a similar way, the charged plate was blown upon by bellows, for four seconds, without any material loss of electricity, which was likewise the result when it was plunged *in the vapour* of boiling water. From this last experiment we may observe how small a part of the loss, which takes place in all electrical experiments, arises from the conducting power of the air, even when charged with moisture."

The remaining articles are hardly reducible to any thing in the shape of extract. Skipping also a few pages of tables, and leaving the "mechanical science" to scientific carpenters and masons, note we the following proof of the perfection to which French chemists are bringing their art. They profess to have discovered a mode of *making* diamonds. So does Mr. St. John Long profess that he can cure tubercular consumption. Article 10 thus condenses the history and particulars of the discovery:—

"*Supposed Discovery of a method of making Diamonds.*—Much expectation has been excited by the announcement of a method of making diamonds, discovered in France, and actually communicated to the Academy of Sciences, at Paris, by M. Gannal, on the 3d of November last; but, as yet, the expectation has not been satisfied, and no philosopher, who can be considered as competent to judge of the process and the products, has as yet sanctioned the announcement by the authority of his opinion. The point to be gained is the crystallisation of carbon, and this, it is said, is done by the simplest possible case of chemical affinity. The well-known liquid compound of sulphur and carbon is put into a vessel, covered with a layer of water, and then a stick of phosphorus introduced; the phosphorus dissolves in the sulphuret of carbon, soon takes the sulphur to form a sulphuret of phosphorus, and then the carbon is set free as a crystalline diamond powder. It is distinctly said that crystals are obtained white or colourless, very brilliant, hard, extremely refractive, and admitted by workers to be real diamonds.

"Since these announcements, other diamond makers have come forward, one of whom, M. C. de la Tour, informs the Academy of Sciences, that he also had succeeded in crystallising carbon and obtaining diamonds by methods different from those of M. Gannal, and that a sealed packet, left with the Secretary in 1824, contained an account of his first processes. From M. Cagniard de la Tour's character as a philosopher, we must feel satisfied he would not say so much without some good foundation; and on this ground, therefore, we have hopes that, upon inquiry, the crystallisation of carbon may prove to have been effected by art. M. Arago also announced that he knew *another person* who had arrived at similar results."

But here follows a note of some little consequence to this subject:—

"*Academy of Sciences of Paris, Nov. 24th.*—M. Thenard gave an account of the experiments made by himself, MM. Dumas and Cagniard de la Tour, to verify the trials, by which the latter thought he had obtained the power of crystallising carbon, and forming diamond. An accurate analysis of these crystals, which had no colour, proved, however, *that they were only silicates, and not artificial diamond.*"

Glucinum and *Yttrium*.—These earths have been decomposed by M. Wöhler, by a process the same as that which he applied to alumina. The metallic bases are as little oxidable as aluminum, and have many analogies with it. From the experiments which have been made on these earths it results,—"That the bases of alumina, glucina, and yttria, are metals which, at ordinary temperatures, do not act upon air or water, but decompose water when acids or alkalies are present, and burn vividly in oxygen, chlorine, bromine, iodine, sulphur, selenium, and phosphorus."

The following experiment is interesting:—

"*Vegetation in Air at different Pressures*.—M. Dobereiner took two equal glass vessels of 320 cubic inches' capacity each; in these were put portions of the same earth, in which two portions of barley had been sown, and moistened to the same degree. The air was now exhausted from one vessel until the pressure equalled 14 inches of mercury, and in the other it was condensed until the pressure equalled 56 inches. Germination took place in equal times, and the leaflets were equally green; but, at the end of 15 days, the shoots in the rarefied air were only six inches long, but in the condensed air from nine to ten inches. The former were expanded and soft, the latter rolled round the stem, and solid; the former were wet on their surface, and especially at the extremities; the latter nearly dry. ' 'I am disposed,' says M. Dobereiner, 'to believe that the diminution in the size of plants, as they rise on mountains into higher regions, depends more on the diminution of pressure than of heat.' The phenomenon of drops of water on the leaves in rarefied air calls to mind the relation of a young Englishman, who, whilst passing through Spanish America as a prisoner, remarked, that 'on the highest mountains of the country the trees continually transpired a quantity of water, even in the driest weather, the water falling sometimes like rain.'"

The annexed communication, by a naturalist of considerable talent and observation, Lieut. John H. Davies, contains a strong proof that the conjecture to which it alludes is something more than merely ingenious.

"*Sexual Instinct of Insects*.—It has been asserted, that the circuitous flight of the butterfly tribe arises from one sex pursuing, through the air, the track of the other; and that, if an unimpregnated female of the *phalæna quercus* (egger moth) be carried in a gauze cage into the haunts of that species, numbers of the males will be attracted, so as to be easily captured. I have never had an opportunity of verifying this fact, but, from a circumstance which occurred to me during the past year, I have no doubt of its correctness. I was engaged in rearing lepidopterous insects from the larvæ, and had a great variety of the pupæ of different species. One evening, I found a female *sphinx ocellata* just emerged, which, in lifting from the floor, ran up my arm and round the collar of my coat: two hours after, on returning to my study from shutting some glass frames in the garden, a very fine male, of the same species, was fluttering on my shoulder, where the female had previously crawled. But a still more curious fact, which must appear almost incredible, remains to be stated. Two females of the sphinx populi were evolved. The next day I found three males in the room. As no one had entered it in the interval, nor was there apparently any mode by which they could gain access, I was somewhat puzzled to account for their appearance. The same evening, however, the mode of entrance was made apparent, by two more males, of the same species, coming down the chimney; one of which fell into a vase standing on the fire-place, where I captured it before it could extricate itself. Afterwards, upon occasion of the evolution from the pupa state of females of the *phalæna bucephala* and *phalæna salicis*, the windows of my study were completely besieged by males of the same species, which, upon throwing open the windows, eagerly rushed in."

We close our notice with the following extract on the subject of

"*Spontaneous Human Combustions*.—That cases happen in which the human being, even when alive, undergoes a sudden destruction, as if by a consuming process, cannot be doubted; and these are now so numerous as to have induced M. Julia de Fontenelle to read a paper on the subject to the Academy of Sciences at Paris. Fifteen instances are particularly described by him, from the details of which the following general results are obtained:—1. Generally those who have died by spontaneous combustion have indulged in excess of alcoholic liquors. 2. The combustion is almost always general, but in some cases may be partial. 3. It is rare amongst men; the women have, in almost every case, been aged. 4. The body and the viscera have always been burnt, whilst the feet, hands, and top of the head, have almost always been preserved. 5. Although it is known, by experience, that a very large quantity of wood is required to burn a corpse, this particular kind of incineration occurs without inflaming the most combustible substances of an ordinary kind near it. 6. It has not been shown, in any case, that the

presence of an inflamed body is necessary to commence this kind of combustion. 7. Water, instead of extinguishing the flame, appears to give it more activity; and when the flame has disappeared, the combustion proceeds within. 8. They occur more frequently in winter than in summer. 9. The cure of general combustions has never been effected; only of partial ones. 10. Those to whom it has happened have experienced a sensation of strong internal heat. 11. It is suddenly developed, and consumes the body in a few hours. 12. Those parts which are not reached by the fire are affected by sphacele. 13. A putrid degeneration ensues which causes gangrene. 14. The residue of this combustion is composed of greasy cinders and an unctuous fatty matter, both having a fetid odour, which is perceived at a great distance."

QUACKERY.

To the Editor of THE LANCET.

SIR,—In consequence of my belonging to a Society, to the members of which the medical periodicals are sent in rotation, I did not happen to see the communication you received from Mr. St. John Long, (in your Number for 21st of March,) in reference to my last letter to you, until three weeks after its publication, or I should have made an earlier reply; but, perhaps, it is not now too late for me to make some remarks on it. Mr. Long, in the true spirit of quackery, seizes the opportunity I have given him, to puff off the opinions which his patients and their friends entertain of him; I do not suppose that Mr. Long would be so impolitic, as to be otherwise than kind to his patients; it is a part of the system. Talk of *his* mode of treatment prolonging life, in the opinion of friends! why, Sir, we have a man here who will beat him hollow in that respect, as he may see by examining any number of The Devonport Telegraph and Plymouth Chronicle, for the case of one Hallett, a self-dubbed Doctor, who cures every thing. Mr. Long ascribes the diarrhœa to the patient having gone out on a wet day. It needs no ghost to tell us that diarrhœa, in the latter stages of true phthisis, will generally come on, whether the patient is out of doors or in bed; this is something like an unsuccessful chess-player, who, instead of acknowledging his own want of skill, ascribes his loss to some troublesome fellow looking over him. Mr. Long must not, Sir, by talking of the gratitude of his friends, or the amiable qualities of the young man alluded to, (qualities which I well knew, long before Mr. Long had any thing to do with him,) he must not, I say, seek thus to shift from himself the remarks which refer to his *pretended* success. Mr. Long (or his friends for him) has pretended to cure confirmed consumption, by a means which others do not possess; he exacts secrecy from his patients, before they place themselves under his care; and he has published, or connived at the publication (in The Literary Gazette) of assumed cures of consumption, which are not fair cases of that disease; and when a true case of tuberculated consumption has been put under his superintendence, he has failed. These are *facts* which Mr. Long requires of me—*ex uno disce omnes*; I mean to say, Sir, that Mr. Long, as far as the faculty has been able to learn, possesses no better means of curing phthisis, than any well educated practitioner, nor has he shown by his cases, that he possesses even these means. Every practitioner knows, that symptoms of debility and emaciation often occur in bronchitis and chronic catarrh, which are designated by the world, cases of *decline* or consumption, and there are not wanting dishonourable men who will confirm such opinion, and designedly embrace such an opportunity of pretending to cure as consumption, what they know to be a very different disease. If Mr. Long wishes to avoid the imputation of such conduct, he will no longer lock up himself and his system with his patients, but will follow the example of Dr. Beddoes, with respect to cow-vapour and gas; of Dr. Jenner, with regard to tartar emetic ointment; and of Sir A. Crichton, in reference to tar-vapour; he will let his system have the fair trial to which practitioners throughout the kingdom will instantly submit it. He says he wants no favour, but "cheerfully and fearlessly challenges the impartial and honourable investigation of the public and the faculty." We wait for the opportunity; let him give it to us, and then we shall see whether his assertions are worthy of consideration; if they be, he may be assured that he will gain more by a fair and honourable celebrity, than he can hope to acquire by means which quackery has always adopted. He talks of "ungentlemanly remarks;" why, the man who, for the sake of filthy lucre, or an ephemeral reputation, conceals a remedy for one of the most fatal diseases that we are acquainted with, deserves the execration of every honourable mind; leaving out of the question the moral responsibility he incurs, by withholding a mode of cure which (if beneficial?) might be applied to the relief of human suffering throughout the country. If Mr. Long dare to divulge his secret, I have no doubt it will turn out to be just as efficacious as the infallible earth-bathing remedy of *Dr.* Graham, or the beef steaks and porter of Dr. Stewart.

I am, Sir, your obedient servant,

Plymouth, April 14, 1829. M. D.

THE LANCET.

London, Saturday, April 25, 1829.

Some discussion took place a few evenings ago, at the Westminster Medical Society, on the question whether a medical man, in giving evidence as to the cause of death in a criminal trial, was bound to confine himself strictly to the appearances exhibited on inspection of the body; or, whether he ought also to take into his consideration the moral circumstances, which, in connexion with the appearances of the body, might materially influence his judgment. Medical men are too apt, when called upon to give evidence in criminal cases, to consider themselves bound to take a purely technical view of the question on which it is their duty to inform the Court and the Jury, and to exclude from their consideration the influence of circumstances, which could not fail to affect the conclusions of non-professional witnesses. From an excessive anxiety not to mislead, or a false tenderness in favour of life, they often embarrass judicial investigation by raising doubts, where none could be rationally entertained, and not unfrequently defeat the ends of justice. The evil arising from this cause would be greater than it practically is, if the indecision of medical witnesses were not so generally known and appreciated by juries, that verdicts are frequently returned in opposition to their testimony. In cases of murder, however unequivocal may be the evidence by which the crime is brought home to a prisoner, it often happens, that when the medical witness comes to be examined, he gives a cautiously qualified opinion as to the cause of the death of the deceased. He will puzzle himself in the search of remote possibilities to explain that which a moral certainty accounts for, and go to Rome for a reason, when he can find one at Charing Cross. Besides tenderness for the life of the prisoner on trial, there is another cause, we believe, which frequently occasions this indecision in medical witnesses, and that is, an erroneous view of the grounds on which they are entitled to give evidence in criminal cases. In general, witnesses must speak to facts, and opinion is not evidence, except when given by professional men in matters relating to the art or science with which they are conversant. But there is nothing in the rule of law which admits testimony of this description, to restrain professional men from taking into their consideration probabilities as well as facts, which may be distinct from those of which they are professionally best able to judge, in order to arrive at an opinion founded upon all the circumstances connected with the subject of investigation. It is supposed, that if a medical witness formed his judgment partly upon circumstances independent of the medical facts of the case, he would, *pro tanto*, stand in the situation of a non-professional witness, whose opinion is not legal evidence. But it is to be borne in mind, that a professional opinion may, and it is often essential to the soundness of such an opinion that it should, be founded, partly upon facts of which the witness is, by virtue of his profession, best capable of judging, and partly upon facts unconnected with his professional knowledge, and also upon moral probabilities, which may most materially affect his conclusions.

In making these observations, our readers will not suspect us of a desire to underrate the importance of exercising a due degree of caution in giving medical testimony, or to encourage the profligate effrontery with which medical witnesses have come forward, on some recent occasions, to volunteer opinions upon oath, without the slightest knowledge of the facts which formed the subject of judicial investigation. It is one thing for a medical witness to combine moral evidence with the evidence of his senses, and to give an opinion, founded partly upon facts, and

partly upon probabilities; and another, for a medical witness to volunteer an opinion without any evidence at all, and to swear, for example, to the skilful performance of an operation which he has never witnessed.

If the eyes of the public were not by this time thoroughly opened to the workings of the corrupt system, by which Neveys and Noodles are smuggled into medical office, nothing would have tended more effectually to degrade the character of the whole profession, than the disgraceful exhibitions recently made in courts of justice by hospital surgeons. The errors of medical witnesses in criminal cases, arise, for the most part, from misdirected benevolence; but the testimony given in the civil cases to which we allude, admits only of one explanation—it could have proceeded only from an intrepid disregard of the obligations of an oath, and a resolute determination to screen a corrupt system, at all hazards, from the consequences of public scrutiny—from the disgrace of detection and exposure.

There is a class of civil cases, often involving large pecuniary interests, in which medical men are called upon to give opinions *pro* and *con*, and in which much reputation may be gained or lost, by the manner in which such opinions may be delivered. Mr. GREEN will understand the force of this observation, when we remind him of the remark made by Sir JAMES SCARLETT upon his testimony, at the close of a most raking cross-examination, in an action brought by the executor of the late Duke of Saxe-Gotha, against the Atlas Insurance Company, to recover a sum, to the amount of which the Duke's life had been insured a few months before his decease. In this case the mental imbecility, as well as bodily disease of the Duke, was proved by such unequivocal testimony, that even Lord TENTERDEN, patient and enduring as he is, discovered strong symptoms of impatience at an early stage of the proceedings. There were three hospital surgeons subpœnaed on the part of the Atlas Company, and the same number, we believe, attended to assist in making out a case for the Duke's executor. Mr. GREEN was one of the latter, and he gave his testimony with an intrepidity which might have been serviceable in a less desperate cause. It had been proved, that the German Potentate had lost the use of his speech for months before the policy of insurance on his life was effected; that he was reduced to so deplorable a state of imbecility, as to have become an object of ridicule to his own domestics; and that on the examination of his body after death, a tumour of enormous dimensions had been discovered pressing on the brain. Yet, in the teeth of all these facts, Mr. GREEN swore that he not only did not believe the Duke to have been deficient in intellectual vigour, but *quite the reverse*! Mr. GREEN was the first medical witness examined, and it is almost needless to observe, that, after his cross-examination, the case went no further.

An Essay on the Use of the Nitrate of Silver in the Cure of Inflammation, Wounds, and Ulcers. By JOHN HIGGINBOTTOM, Nottingham, M.R.C.S. Second Edition, much improved and enlarged. London, 1829. Seeley and Burnside. 8vo. pp. 204.

MR. HIGGINBOTTOM has changed the title under which the first edition of his Essay was published, and has substituted the term "nitrate of silver" for that of "lunar caustic." He has done this under the following impression. "I would in this place" (the preface) "correct a prevailing error in regard to the action of the nitrate of silver; it has been termed a *caustic*; this is altogether erroneous; it is the very reverse of a caustic. It is impossible to destroy any but the most superficial parts by the nitrate of silver. In this it differs widely from some other substances to which the same term has been applied. I speak

of it in its solid form. Instead of destroying, it frequently *preserves* parts which would inevitably slough, but for the preservative powers of this remedy. A new term is, in fact, required for the peculiar kind of influence which the nitrate of silver possesses in subduing and checking inflammation," &c. &c. To this, however, Mr. Higginbottom makes no attempt to help us, though he has had so many opportunities of observing the action and effects of the nitrate, that he might, without evincing much presumption, have suggested some term to which they were capable of being reduced. This would have been but a fair set off against the countenance which the first edition of his book gave to the error of which he now complains. Throughout that edition it was treated as a caustic.

We should have expected that the additional experience of three years would have enabled the author to treat his subject in a more philosophical manner than that in which he first imparted his views; and we should have been glad of the opportunity, through his assistance, of assigning a peculiar application of this kind a more definite station amongst the remedies for external injuries and disease, than it has yet obtained; but Mr. Higginbottom has hardly even a speculation upon the subject. He still regards his duty to be that of "simply ascertaining and stating practical facts," and is "quite at a loss to determine how the apparently simple process acts in subduing inflammatory action." We are sorry for it. Interesting as the facts he details may be, the value of the Essay would be materially increased, by any scientific deductions drawn from them.

Having noticed that which our author has *not* done, we shall very briefly mention the "additions and improvements" which he has made to the present edition. "It is but just to add," he observes, "that this should be regarded as a new work. The greater part of its pages are occupied by subjects scarcely touched upon in the first edition. I had but conjectured at that time, that phlegmon, erysipelas, inveterate ulcers, &c., as well as punctured and bruised wounds, would find so easy and effectual a remedy in the nitrate of silver."

At page 149 is a chapter intitled "Burns and Scalds."

"I have found that, by slightly passing the nitrate of silver once over a burnt surface, the pain is increased for a short time, but then totally subsides, vesication appearing to be prevented; the black cuticle peals off in a few days, leaving the part well. In cases in which the cuticle has been removed, the nitrate of silver applied on the surface, induces an adherent eschar, and prevents the consequent ulceration. In cases in which a slough covers the surface, I have removed it with the scissors and forceps, and applied the nitrate of silver, and have cured them by the unadherent eschar. In one case, in which, after a burn, the part was healed over, and a considerable cicatrix formed resembling a fungus, and attended with severe pain, the nitrate of silver, applied as in external inflammation, removed all inflammation and pain."

Six cases of recent burn follow, in each of which the nitrate of silver was successfully used. In *very* extensive recent burns, Mr. Higginbottom says he has had no opportunity of trying it.

There is then, a case of *erysipelas from a burn*, and the following, entitled "*Hard and Painful Cicatrix after a Burn*," which we extract, as being, according to the author, "a peculiar case, almost incurable by any other means."

"Timothy Coleman, aged thirty-two, whilst in a state of intoxication, burnt his shoulder and arm very extensively. He was under the care of a surgeon, and the sore was healed in ten weeks. There still, however, remained an inflamed surface, larger than the size of the hand, over the deltoid muscle. It had the appearance of fungus cicatrised over; it was attended with so much heat and pain, as to prevent him from sleeping at night, or following his employment in the day, for thirteen weeks, even after it was said to be cured. He had used a number of remedies. His health continued good. I first saw him June 20, 1827. I applied the nitrate of silver, as in external inflammation, over the whole diseased surface. I directed the part to be exposed

to the air for three days, and after that time to be covered with the neutral ointment. As my patient resided at a distance in the country, I did not see him again for a fortnight, when he informed me that eight hours after the application of the nitrate of silver, he had more ease than he had experienced since the accident, that he was nearly free from pain, and that he then slept well. I again applied the nitrate of silver very freely on the whole affected surface, as there still remained several inflamed spots, besides several slight ulcerations caused by the nitrate of silver. I then covered the part with the neutral ointment. In a week, I saw him again. He said he had suffered more from the last application than from the former one, that it had acted more like a blister, that there had been a very free discharge, and that the eschar had separated sooner. Scarcely any irritation, except from a few superficial ulcerations, on which I passed the nitrate of silver very lightly; I continued the neutral ointment. A few weeks afterwards this man called on me to say that he was quite well."

He recommends the nitrate as a blister, and, with his friends, thinks it will soon supersede the use of cantharides, of warm water, and of the heated metallic plates of Sir Anthony Oyster. It can never *supersede* the "metallic plates."

We subjoin a case of blistering in *inflammation of the urethra.*

"Mr. C., aged thirty-five, had been affected several times with virulent gonorrhœa. He was again infected, three or four weeks ago. In four days he had severe chordee. The usual remedies were administered, and leeches were applied along the course of the urethra. The discharge ceased; but the inflammation became so severe as to require, in the course of three weeks, the application of a hundred and twenty leeches, and he was twice bled from the arm: he had frequent warm baths, and purgative and anodyne medicines were given, but without any amendment in his complaint. I attended this patient, in consequence of a total retention of urine, late at night. I passed the catheter, and gave him sixty drops of laudanum. On the following morning, he informed me that he had passed a very bad night, and was still unable to void urine. On examining the perineum, I found it very hard, swollen, and tense. He complained of a most distressing, aching pain, striking in a direction to the left side of the abdomen. This pain had been so severe for nearly three weeks, that Mr. C. had been totally deprived of sleep, and was almost exhausted; his countenance very pallid. I moistened the perineum, and the whole course of the urethra to the end of the penis, and then applied the nitrate of silver freely, so as to cause immediate vesication. My patient complained much, even before I left the room. I visited him in eight hours, and learnt from him that he had experienced a severe burning pain for three-quarters of an hour, and then a smarting pain for several hours. All pain, however, had then quite left him, and he was perfectly easy; but he had passed no urine. Next morning still perfectly easy, had passed a good night, and had enjoyed more sleep than he had done for three weeks. There had been a very free discharge of serum from the blistered part. No attempt had been made to pass urine. The catheter used. Next day the blistered part had a moist, soft, doughy feel, and had lost all the character of inflammation; there was still a very free discharge of serum. This discharge continued four days after the application of the nitrate of silver. No further local remedy was required. I gave saline and purgative medicine. The use of the catheter was resumed at times. About a week after this period a free gonorrhœal discharge came on, and continued for some time, but it gave way to the common remedies."

There are some cases of *gun-shot wounds, neuralgia, ulceration of the tongue, &c.*, and one of *contracted rectum.* The patient in this latter case, aged 50, suffering under almost total obstruction; the stricture occurred about two inches within the anus, very small and firm. He was extremely emaciated, and could with difficulty use a bougie. Mr. Higginbottom was induced to apply a stick of the nitrate within the contraction.

"This I effected with the common nitrate of silver case, using the index finger of the left hand as a director. The application caused a sense of burning heat in the part for two hours, with severe tenesmus, and a considerable discharge of mucus. My patient obtained so much relief, however, from the application of the nitrate of silver, that he was enabled to bear the introduction of a small bougie two days afterwards. I then persevered in the use of the bougie, and whenever the irritation became great, I applied the nitrate of silver as before. By these means I was enabled, in a short time, to pass my finger through the stricture. I found it to be about two-thirds of an inch in extent. I could discover no ulceration. I gradually increased the size of the bougie, and, at the expiration of a few

months, the patient could bear to pass the largest rectum bougie: he also gradually recovered his health and flesh. The patient has continued the introduction of the largest rectum bougie once or twice a week for the last several years. In this case it is very evident that the patient's life was saved by the use of the nitrate of silver."

The work contains very considerable information, and the surgeon may consult it with advantage.

LONDON MEDICAL SOCIETY.

April 20, 1829.

Mr. Callaway, President, in the Chair.

DISGRACEFUL REPORTING IN THE CHARITY GAZETTE.—VITALITY OF THE BLOOD.

The President did not take the Chair until a quarter past eight o'clock.

The Registrar having read the minutes of the last Meeting,

Mr. Wray rose. He was exceedingly sorry to complain, either of the minutes of the Registrar, or of any thing which appeared in print; but he felt he should be compromising his respectability in that Society, unless he took this opportunity of doing so. He was certain that no medical gentleman could read the report of the Society's proceedings, in a certain publication of Saturday last, without feeling disgraced by it. The report was calculated to degrade the character of the practitioner in the highest degree. Neither Dr. Walshman nor himself had said one word about *force*, in relating the case he had described to the Society last Monday, yet the term *force* was used in this report two or three times. The Society would recollect, it had never been uttered there. Contrasting this report with that in The Lancet, there was no comparison between them. The report in The Lancet, as far as regarded himself, could not be exceeded in impartiality. He felt bound to make these remarks, for if this system of reporting was permitted to go on in the publication in question, there would very shortly not be a practitioner found, who would come forward and relate a single case to the Society. In attempting to turn, in the case referred to, he had indeed used great exertions; so had Dr. Walshman. He had succeeded in those exertions, after Dr. Walshman's hand had become cramped, but no force was resorted to. He appealed to the Society to say, whether a repetition of such reporting ought to be permitted.

The President was quite sure the Registrar* would take such measures, as would prevent any thing like a similar report being made in future.

The Registrar said, that as far as related to the minutes, he should take care that the corrections were attended to.

Mr. Greville Jones rose, but

The President expressed a hope that the observations upon this subject would not be prolonged. He thought it due to Dr. Whiting, who was then present, that after attending by invitation, for two successive nights, he should have an opportunity of expressing his sentiments upon the vitality, or non-vitality of the blood.

Mr. Jones considered himself entitled to be heard. It happened, that at the last Meeting he was the individual who took notes in the absence of the Registrar, of the proceedings of the Society; and not having been accustomed to that office, he might have mistaken what Mr. Wray had said; but, as far as having any feeling against Mr. Wray, which could have induced him to misrepresent his statement in any way, he flatly denied it; he was sure, there would be no hesitation in making any alteration in the Registrar's book. As far as regarded the publication Mr. Wray had complained of, with that he (Mr. J.) had nothing to do. The individual who was in the habit of reporting for that publication, asked him for permission to make use of his notes, which he allowed; and he hoped the conductors of that publication would have honour enough to correct any mistake that might have been made in the report. The word *force*, however, of which Mr. Wray had so much complained, did not necessarily imply *violence*.

The President, on Mr. Jones sitting down, expressed his wish now to hear Dr. Whiting.

Dr. Williams rose to a point of order. It was customary to allow ample time for any Members to make remarks upon the minutes. He thought this should be courted rather than that new matter should be hurried on for discussion in place of it. The case related by Mr. Wray, was of great practical importance, infinitely more so than the vitality or non-vitality of the blood, and he considered therefore, that the subject ought to be concluded, before this new topic was introduced.

The President would be extremely happy to accede to it; at the same time, he thought there was a certain courtesy due to

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* The avowed reporter for the Charity Excrescence.

Dr. Whiting, considering the circumstances under which he had attended.

Dr. Walshman considered it due to Mr. Wray to state, that in his opinion, no man could have conducted himself with more deliberation, propriety, and judgment, than that gentleman had done in the late case. It certainly was a case, the like of which might hardly ever be expected to occur again. No man ought to doubt, that Mr. Wray had acquitted himself in the most judicious and professional manner.

Mr. Sheardy expected the discussion on the vitality of the blood would have had precedence, or he should have brought forward his case of spontaneous evolution, of which he now gave notice for the next evening.

Dr. Gordon Smith observed, that if the discussion upon the vitality of the blood was not to proceed, he should claim precedence, in giving a narrative of his late campaign at the Old Bailey. (*Much laughter.*) The papers he held in his hand, if not read that night, would be printed before the Society met again.

After a few remarks from Mr. Briant, Dr. Stewart, and Dr. Whiting, (Dr. W. considering that he ought not to commence the discussion)

Mr. Bransby Cooper rose. He should not have done so, had he not considered it due to Dr. Whiting, that something should be said in opposition to his known views, to afford him a basis for what he might address to the Society. Consequently, what he (Mr. B. Cooper) should now say, would be principally hypothetical. Man knew nothing of life; yet how could Dr. Whiting suppose the blood to circulate through the vessels of the body merely like warm water, letting those vessels act upon it, and without allowing it in itself any vital power. The act of coagulation was a proof that blood possessed life. Action and life, as far as he could learn, were the same thing. In proportion to the strength and vital powers of a person, so had the blood the power of coagulation after it was drawn, and this alone could depend upon its vital principle. Again, how could coagulable lymph be organised in vessels, and shoot into every part, without the probability of the blood possessing vitality? There was no instance of a non-vital part connected with a vital part by growth and adhesion. Food taken into the stomach before it could be converted into blood, was sometimes ejected by the action of the stomach, after having been acted upon by the gastric juice so as to have gone into a state of coagulation. Suppose a person to be killed by lightning, and another to fall down dead from apoplexy; let a part of a muscle be taken from the one, and let the nerve be irritated in it; it will have the power of contraction: irritate the nerve and a part of the muscle in the other, and it will be motionless. Take the blood from the one, it will have the power of coagulation; but in the other it will not. The coagulation of the blood proved its vitality in the one case, as the contraction of the muscles proved its vitality in the other. The internal and vital coat of the artery could not give action to the blood, unless it had vitality. With regard to poisons, how could dead matter thrown into the stomach, produce baneful effects upon the system, unless there was a vital action in the circulating medium?

Dr. Gordon Smith made a few observations on the effect of poison taken into the stomach, but not with immediate reference to the present question.

Dr. Whiting regarded the coagulation of the blood as the strongest argument to be adduced in favour of its vitality; if this did not prove it, nothing else could. Now the coagulation of the blood did not take place in the vessels in the natural way; where, then, was the proof of vitality? Coagulation was not one of the offices that the blood sustained. If the blood were vital, it ought to show its vitality during life, and not wait till after death to do so. As to what was called the coagulation of the capillaries, he considered that no such thing existed; the fluid found there was not blood, but a mere secretion. The coagulation which took place after death, or after the blood was drawn from the body, was that of the fibrin: this was but a part of the blood, for the serum and red particles remained the same. The question then would be, Was the fibrin vital or not? Fibrin did not exist out of the body, except in a state of coagulation. It might be said, that blood contained fibrin which did not coagulate; where was the proof of it? The serum and fibrin united, formed a fluid quite distinct from the fluid of the serum and fibrin when separated. Supposing it were admitted that the blood possessed vitality, because the fibrin coagulated after death, or after the blood was drawn from the body, could the same thing be said of urine when it deposited a sediment? If the argument did not hold as to both, it must altogether fall to the ground. Then with respect to the nourishment of the blood as a proof of vitality, whence came the blood? Why, from food. Then if the blood was essentially vital, the food was essentially vital also. The change it underwent in the stomach was merely chemical, and could be imitated out of the body. As to the improbability of vessels shooting into that which did not possess vitality, he (Dr. Whiting) did not think he could be called upon to argue so absurd a position. In short, the vitality of the blood did not appear to

him to be supported by a single fact, nor could he see why any one might not, with equal justice, maintain the vitality of food itself.

Mr. Bransby Cooper could not agree with Dr. Whiting. His answer to the argument, that the serum remained, after the fibrin had coagulated when blood was drawn, was, that nothing but the salts contained in the serum prevented it from proceeding to coagulate. Let the salts be separated from it by acid, and there would be found fibrin or the power of contraction still. He maintained, that food did acquire vitality in the change it underwent in the stomach.

Dr. Shearman did not think a sufficient distinction had been drawn between the terms life and vitality. His views on the subject, for want of a clear definition, did not allow of his coinciding with the particular views of either speaker.

Dr. Gordon Smith, and Dr. Walshman, also made some observations on this subject. Dr. Walshman considering the above terms to be closely allied, and that the blood was a vital fluid.

Mr. Wray considered the result of transfusion, as a strong proof of the vitality of the blood. No other fluid could be injected into the veins, which would restore animation, and prevent death, as blood had done.

Some other gentlemen addressed the Chair at a late hour, and the Meeting did not separate until half an hour after its usual period.

In the proceedings of the last evening, page 89, line 41, for bloodletting *read* opium.

WESTMINSTER MEDICAL SOCIETY.

April 18, 1829.

Mr. Arnott in the Chair.

An accident prevents us from giving a detailed report of the proceedings of the Society this evening.

Dr. Milligan related some cases of acute rheumatism, involving the question whether pericarditis, supervening upon acute rheumatism, is produced or prevented by copious bleeding, which occupied the attention of the Members. Dr. Stewart, Dr. Johnstone, Dr. Macleod, Mr. Hunt, and Mr. Burnett, were the principal speakers.

At the close of the discussion, Dr. Gregory read part of a paper communicated by Mr. Ward, a corresponding Member of the Society, containing the cases of two brothers, who, at the latter end of last month, to cure themselves of some complaint, (syphilis we think was stated) rubbed in upon the lower part of the abdomen, each one ounce of corrosive sublimate mixed with hogs' lard. We subjoin the particulars as nearly as possible. The first of the two men stated, that having rubbed in his portion, he felt immediately afterwards as if he were roasting alive; that, unable to remain in bed, into which he had got, he arose and proceeded to a hay-loft on the premises, where he expended a bucket of water in endeavouring to allay the torments he was suffering. The symptoms which ensued were excessive nausea, extreme pain in the stomach, great thirst, &c.; on the following day, he experienced violent constriction about the fauces. On the third he got worse, and ptyalism ensued; this was followed by headach and discharges of blood, the tongue became swelled and black, and on the 4th of April he died.

The other brother, who was aged 19, after performing the same process with the same sensations, went out, and laid himself with his belly downwards in a stream of water. When discovered, his pulse had risen to 130. It was thought advisable to pass a catheter into the bladder, but no urine was drawn away, and he gradually got worse. The symptoms in this case were much the same as in the other, but ptyalism was not so excessive. The pain eventually ceased, mortification ensued, and about a fortnight after the death of the other brother, he died also. A *post-mortem* examination took place in this case, when a strong proof was given of the similarity between inflammation arising from internal and external applications. The stomach was highly inflamed, with spots of ulceration; the small intestines and the colon were also inflamed, with certain peculiarities; the liver was enlarged, the bladder contained no urine, serum was effused in the cavity of the abdomen, and a considerable number of worms were found in the stomach.

Some remarks were made on the subject by Dr. Gordon Smith, Dr. Epps, and Mr. Thomson. The Chairman stated at the close, that the next evening was the last of the session, and announced the approaching St. George's Hospital dinner, to which, he observed, it was always usual to invite the Members of this Society.

HUMAN DISSECTIONS.

To the Editor of The Lancet.

Sir,—The following observations were suggested, after reading the communication of your zealous and able Correspondent "Rinensis," in The Lancet dated February 28.

I agree with him in its being somewhat

mysterious, how the "repeal of that statute which subjects, as an additional mark of infamy, the bodies of executed murderers to dissection," can tend to meliorate the necessities of the dissecting-room. It can only do so, by excluding more effectually from public eye, any information calculated to keep alive their prejudice to human dissection, (of which they are reminded by reading the sentences of those criminals,) and thereby rendering the midnight depredations of resurrectionists, as they are termed, more secure; for, as naturally as the uninitiated shudder at the idea of cutting piecemeal their fellow-creatures or relatives, so carefully ought we to avoid awakening their fears. I cannot but deprecate (as attracting public odium) the unmeasured terms in which newspaper editors set forth to public scrutiny the conduct of the above class of malefactors, whenever opportunities occur to them of doing so. Such men ought rather to shield than to expose, knowing that the practice of dissection is a necessary evil. It would be well indeed, if the sanctuary of the dead could be preserved inviolate, and public apprehensions tranquillised, by the discovery of some less obnoxious source for the supply of materials, commensurate to the necessity for the advancement of physiological and pathological science. I certainly think, the least objectionable and most ample revenue will be found to accrue from "the appropriation of unclaimed bodies," which might readily be transmitted free from popular animadversion. I may here state, that I attended the surgical practice of a large pauper lunatic asylum at Wakefield, the unclaimed tythe of mortality of which would furnish a few of the naked tables in the metropolis.

That it is as absurd to suppose an assassin will be turned from his sanguinary purpose by any recollection of his post-mortem exhibition, as it is to imagine the detection of disease, independent of anatomical knowledge, is as obvious, as it is that the agents of exhumation are the most desperate and ruthless set of villains under heaven; of this, the late disclosures at Edinburgh are a convincing testimony; and who knows how many Burkites at this moment carry on their unnatural trade in London or Dublin. I am aware the temptation is greater in the former place; and who will not support me in the assertion, that the clandestine sale of bodies presents the most inscrutable depository for the victims of premeditated vengeance? Indeed I doubt not, Sir, but you remember the rumour which was sent abroad at the trial of the murderers of Weare, that, had they disposed of their sacrifice to a body snatcher, it would have been impossible to have convicted them; and who could have propagated such an idea? why, most probably, those who had before used that channel.

And now a few words to those candidates for more than Zenonian fame, whose violent philanthropic inspirations would persuade to bequeath their "mortal coil" for "anatomical sepulture:" let them not disregard the affections of those whom they cherished while living, who will weep over them dead, and whose chiefest solace then (after the contemplation of the transport of their immortal part to a blissful eternity) will be in the performance of those offices, which the purest sentiments of our nature have ordained, and which custom has sanctified in the restoration of the disinherited fabric, to the bosom of its parent earth; and it is acknowleged, notwithstanding the sarcasms of the stoic, or the Utopian speculations and unblushing effrontery of the sceptic, that, without such ritual exercises, the constitution of man would become brutally insensible, and morally unfit for social intercourse.

In conclusion, it would be adviseable, when called to visit in sickness the man who had strenuously forbid the propriety of dissection under any circumstances, to address him thus. "Sir, your disease is of a grave cast, and I regret that, never having had an opportunity of dissecting the part in which it lies, I am quite unable to render you any assistance." His answer, I anticipate, (dictated by that uncompromising passion for self-preservation, which subjugates every minor consideration,) had he a brother or father lying dead in the house, would be to the effect, that the surgeon should lose no time in fleshing his scalpel in the corpse of his deceased relative, in order to obtain the requisite information; as regardless of his former scruples as the young widow, mentioned by Voltaire, who, upon the loss of her husband, grieved sorely, insomuch, that she was like to die, until the announcement of an early candidate for the defunct gentleman's half-occupied bed, dissipated her woe; no sooner was the successor acknowledged, than he complained of severe pain in his side, and upon being interrogated by the fair widow as to its cause and cure, replied, that nothing but the application of a dead man's nose could relieve him; whereupon the lady instantly repaired into the adjoining room, and cutting off the nasal promontory of her yet unburied spouse, returned with it, to the astonishment and disgust of her new admirer. Now I hold there is great similarity between the unreal hesitation of the one, and the collusive tears of the other; each being actuated by the same principle of self-interest, the pair are as ugly portraits of human infirmity, as any one would wish to see. Thus we have the unsubstantial foe to anatomical pursuits,

défaut de la cuirasse, ignobly surrendering to the enemy, whom hitherto (cased in the strong armour of sound health) he so tauntingly defied.

I am, Sir,
Your very obedient servant,
H.

Tickhill, April 13th.

LATE INQUEST AT GUY'S HOSPITAL.

To the Editor of THE LANCET.

SIR,—Having observed in THE LANCET of last week, some observations headed "Curious Coroner's Inquest," in which my character is made the subject of satirical comment, and my being accused of having made observations which never escaped my lips; I hope you will, in accordance with your usual impartiality and justice, allow me, through the medium of the same extensively circulating pages, to refute so gross a misstatement, and thereby extricate my character from that unmerited censure. Had I not been conscious of never having intentionally provoked the anger of any one, I might have considered the observations of your reporter to have originated in some vindictive feeling, as the very style of the composition discloses a partiality for personal resentment, and is, I think, highly disgraceful to the columns of that publication, which professes to "naught extenuate, or aught set down in malice." In my first reply to the Coroner, I am made to say, "I have not had sufficient experience." This is false, experience there was not mentioned; I told the Coroner, that in consequence of the deceased not having been submitted to post-mortem inspection, and having laboured for some time under serious visceral disease, I was incompetent to give a decided opinion, but imagined it probable that she died from those derangements. There is a wide difference between my assertion and the fabrication of your informant, who seems, in this instance, to possess more tact in perverting the truth, than regard for his veracity. Instead of saying to the Coroner, I had not a thought to give, I said I had, but was not disposed to give it; and certainly, from the inadequacy of my means of properly investigating the cause of the woman's death, I did not feel myself justified in urging an opinion. The Coroner inquired of me, if I had seen the deceased every day, I said that I had omitted seeing her *one* day, when, with a degree of moroseness, he told me, that I had been negligent, and ought to have seen her every day, and was incompetent to the duties I had to perform, to which my reply was, that I did not consider him a judge of that matter; neither do I think that he or any other man, unconnected with the profession, is competent to form an opinion as to what may be strictly necessary in cases of disease. If the difficulties of treating disease be such as to puzzle the most intelligent and experienced medical men, does it not appear absurd that any one, whose pursuits have been so diametrically opposed to those of a medical man, should be acquainted with the necessities of the sick, or competent to decide with promptitude upon the correctness or incorrectness of a surgeon's practice. If any analogy can be proved to exist between the construction of a brief, and the forming of a cataplasm—or if collecting the faltering tones of an expiring man into the form of a will, be like setting a simple fracture of the leg, then the pretensions of non-medical coroners may be justified. I might, perhaps, have told the Coroner, I did not consider him a judge of a medical man's talent, but I did not say, I knew more of the *business* than he did, or in any other manner evince a desire to place my knowledge in competition with his. It is true that the Coroner told me I was a very raw and ignorant youth; whether this imputation be correct or not, must be left to the decision of those who have known me, and those who will know me. Amid the many invectives with which the Coroner loaded me, I am not conscious of having deserved any one; I consider once omiting to see the patient, could not be deemed neglect, and I hope that, not presuming to give a decided opinion in a most dubious case, is not deserving the designation of ignorance. Had I spoken decisively from such unsubstantial data, I should have felt conscious of rashness and folly; as I had always considered it indicative of a narrow mind, to draw hasty conclusions from imperfect evidence. Though the learned juror did not value my opinion at the worth of a "button," I estimated his at the price of a glass of gin; and instead of thinking him a stigma and disgrace to his trade, I consider his qualifications so ample, and talents so admirably adapted to his situation, that Bacchus must certainly have been stung with jealousy, to see his son neglecting for a while the inebriating cups, and pompously assuming the dignity of a professional critic.

I am, Sir,
Your obliged and humble servant,
MICHAEL MINTER.

Guy's Hospital, April 19, 1819.

We can assure Mr. Minter, that our report of the "Curious Coroner's Inquest" was not inserted until the most effectual

steps had been taken to ascertain its accuracy. Our reporter, when applied to, alleged that his account was strictly correct, and although he has seen the above communication, he still adheres to the same statement. Non-medical coroners are generally non-medical asses, and if Mr. Minter possesses the slightest knowledge of his profession, it is not in their power to injure him. We should, however, have thought better of Mr. Minter's letter, if he had fully explained the nature of the accident, the treatment which was adopted, and the reason why no *post-mortem* examination was instituted.—Ed. L.

FORENSIC MEDICINE.

Additional particulars relating to the case of Butler.

By Dr. Gordon Smith.

The narrative contained in the last Number of The Lancet, ought, perhaps, to have included the following particulars; but my object in drawing it up was conciseness. Its insertion, and the interest which it has excited, call for further disclosures. I never saw the worthy Sheriff till I waited upon him, at the time already mentioned. I believe the soldier to be a bad character, and that the conviction which afterwards took place as to the robbery, was merited by his general conduct; in consequence, however, of the verdict, I can offer no private opinion as to the larceny part of the business; but it obviously arose out of intoxication, a circumstance which, in the eye of the law, is no excuse for criminal *acts*, whatever it may be, in morals, as to *intention*.

On the morning of the trial, I sought another interview with the Sheriff, to whom, in presence of the Rev. Ordinary, I stated, that it was impossible to foresee what the result of this deeply important investigation might be; but that no verdict of a jury would alter my view of the *professional* merits of the case; so that, in the event of conviction, I should proceed to draw up an application to the proper quarter, which I was confident a vast majority of my professional brethren would sign. The Sheriff pledged himself to be the medium of communication with government, should such a measure be found necessary; upon which Mr. Cotton expressed a hope, that the medical witnesses would take care what they said, for a man charged with rape had been convicted, because two practitioners gave evidence, that they found LACERATION in the female. When *it was too late*, they declared that they meant to have said ULCERATION—a word that would have saved the convict! My reply was nearly as follows: "We have got all the medical jurists in London here, who are not persons likely to speak unadvisedly; but as I shall take my seat by the prisoner's counsel, and watch every word that may be given in evidence, you may depend upon it the medical men shall say *what they mean*."

The lecturer on medical jurisprudence alluded to in "*the case*" published last week, is Dr. Wilmot. I am the more anxious that this should be known, as I never saw that gentleman till we met on this business, and as the publication of the fact may serve to show that there is a right feeling on either side. Let me conclude by adding, that Dr. James Johnson's conduct on this agitating occasion, ought to ensure him the most honourable mention, even in The Lancet.

April 18th, 1829.

NON-MEDICAL CORONERS!!

COPY, LITERATIM *et* VERBATIM, OF THE "POST-MORTEM EXAMINATION *of the Body of* MARY EWEN, *on the 31st of March* 1829.

"BRAIN.

"On raising the Calvarium (or Bones of the Head)—and bracing the Sinuses (which are large veins) I found em gorg'd with Blood—in which the superficial vessels ramyfiing over the Intergyral spaces—participated. A little increase of discolour'd serum in the Left ventricle—the other ventricles were perfectly natural.—Which appearances, together with there being no Lesion of the Brain—or congulation of blood on any part of its surface—enable me to form the opinion;—The patients death was not occassion'd by injury, accident, or any local Inflammation of the Brain, or its Meninges (Coats or Coverings)

"THE BREAST

"On examining the Mamma (Breast)—which was of considerable size—considering the Patient was rather extenuated—and only between Four and Five Months since impregnation took place—I found the Mamary gland considerably enlarg'd, together with the Lactiferous tubes considerably dilated—and fill'd with die-colour'd secretion—together with the superficial and deep-seated

veins being higly turgid :—indicating strong doses, of powerful medcines had been administer'd.

"RESPIRATORY ORGANS.

"On examining the Larynx; Trachea, and Bronchia—I found somewhat more mucous secretion than is usually met with. The Pericardium rather thinner than usual—containing about the ordinary quantity of secretion;—the Heart healthful.—The Lungs healthful—No adhesions of the Pleura—nor much increased secretion in either cavity of the Thorax. Such appearances were not sufficient to account for the cause of the patient's Death.

"THE ABDOMEN.

"On dividing the Abdominal Muscles—a considerable quantity of Serum escap'd from the Peritoneum—every part of which, was vascular—and much inflam'd.—The stomach and Intestines considerably distended—the former as also the Duodenum—were fill'd with grumous vegetable matter—smelling strongly of Savine, and Rue: both, containing numerous specks—or streaks of coagulated Blood—with a high degree of vascularity of the Intestines generally,—particularly the small.—

"The Liver, Spleen, and Pancreas, were all healthful, as regards any chronic Disease—yet somewhat turgid—from their necessary sympathy with the Peritoneum and Intestines. The gall-bladder about three parts fill'd with Bile of a florid Colour. The Kidneys—and Ureters of each side were extremely healthful. The Bladder also healthful—its coats equally strong—and firm—as usually found—about One Third its quantity of Urine contain'd in it—of a Strong, nauseous, Vegetable Odour—similar to that of the Intestines—and rather high Colour'd: the exit or urinary passage from which—I examined most particularly and could not discover any Catheter—or Instrument to draw off the Water—had been pass'd, or previously introduced.

"THE UTERUS AND ITS APPENDAGES.

"On examining the parts of Generation—they appear'd highly inflam'd—and considerably excoriated—particularly on each side of the Corpora Myrtiformes (Two lateral projections about half way up the Vagina). The Os Tincæ, or Mouth of the Womb very much swollen—together with the neck; projecting considerably lower into the Vagina than is usual at such a period of Pregnancy.—Towards the lower and back part, were Two distinct dents, or Impressions—as if made by a blunt instrument in the first instance—while on the right side of the Os Tincæ—were Five distinct punctures made by a sharp instrument—extending into the neck, or substance of the Womb itself—On pressing which matter cou'd out—to the quantity of Two or Three Teaspoon'sful.—The surface around those punctures, as also around the whole of the mouth of the Womb was mark'd with inflammation of an unhealthy character. The whole of the womb considerably thicken'd its internal surface highly inflam'd—and streak'd with several coagula of Blood.—The Liquor Amnii viscid—and ting'd with Blood; the Fœtus was a male—and in every respect natural.

"I am of opinion the Decea'ds Death—was caused by administring Savine, Rue, and Hyoscyamus;—Which tended to excite, or increase the Inflammation of the Womb—brought on, by the frequent attempts to perform an Operation locally—The effects of which, combin'd with the medcines administer'd—were to procure Abortion. Which inflammation caus'd by such means—became communicated—as of necessity must be from their immediate connection;—to the Peritoneum, and Intestines—thereby causing the patients Death.

(Signed) "LAUCE. HEALEY, *Surgeon*,
"*Saint James's Street.*
"JNO. HY. GELL, *Coroner*."

An account of this Inquest appears in *The Times* of April 1. It says that the statement of Mr. Healey "*proved*, that a most dreadful operation had been performed on the deceased;"

In *The Times* of April 2, is the following:—

"Inquest on Mary Ewen.—To the Editor of *The Times*.—Sir,—After returning our verdict, the Coroner ordered Mr. Healey to be sent for, by desire of the jury. When he arrived, the Coroner stood up and said, 'Mr. Laurence Healey, I am desired by the jury to return you a vote of thanks for the very clear and enlightened manner you have given your evidence, which alone has enabled them to a satisfactory conclusion; in which I beg leave to say, I most cordially coincide.' When Mr. Healey bowed respectfully, and took his leave. N.B. It is to be hoped this will be an incentive to all medical men, to follow the same example.

"Yours most respectfully,
"THREE OF THE JURORS."

Coroner, Surgeon, and Jurors; a most exquisite set, truly!

ST. BARTHOLOMEW'S HOSPITAL.

SPASMODIC CONTRACTION OF THE LIMBS AND EXTREMITIES.

William Baker, æt. 17, was admitted into Colston's Ward at eleven o'clock P.M., March 24, under the care of Mr. Vincent, with spasmodic contraction of the muscles of the superior and inferior extremities. About five weeks ago, he was occasionally seized, for about an hour and a half at a time, with spasmodic contraction of the muscles, principally about the hands and toes, but it went off without any medical treatment. About five o'clock, on the evening of admission, he was again seized with a more violent attack than any that had preceded. The arm and legs were drawn up in a manner that gave him more the appearance of a trussed fowl than any thing else. One or two fingers were contracted, a few others extended; so also were the toes. Was quite unable to stand or move. Was not sensible of any material pain. The wrists and toe-joints a little swollen, and had a burning sensation. Was not aware of having caught a violent cold, or of any cause likely to have produced this state of the muscles. Nothing done for him to-night, but ordered to be kept quiet.

25. Ordered forty drops of laudanum, and afterwards hydrg. sub., 4 grs.; jalap, 15 grs. Much the same.

26. To be cupped from the neck and loins to twelve ounces, and to rub a drachm of the unguent hydrarg. on the limbs night and morning.

27. Feels much better to-day. The toes seem quite recovered. Can move the arms with a degree of facility, except at the wrist-joints, the hands being drawn in towards the internal surface of the forearm. The wrist-joints are swollen, and preternaturally hot. Describes the heat to be more violent at one time than another. When the temperature is at the highest, the painful sensation is most severe. Can stretch out the legs with ease. Ordered

Colchicum Wine, a drachm every six hours.

28. Continues recovering, though the swelling, stiffness, heat, and contraction, still continue about the wrist-joints.

April 7. Has continued gradually to improve, though he still feels a slight stiffness and inconvenience, particularly in some of the finger-joints. Left the hospital this day.

DISEASE OF THE TOES AND NAILS.

Thomas Crouch, ætat. 27, was admitted, March 27, into Henry the Eighth's Ward, under the care of Mr. Lawrence, with inflammation of the toes, ulceration of the beds of the nails, and on the outside of the right foot a very fœtid discharge. The patient was a coachman to a gentleman in the Kent Road; has light hair and a fair countenance. About three months ago, felt shooting pains throughout the foot, as high as the ancle; soon afterwards they both presented a scarlet appearance, and the beds of the nails became ulcerated. Seven weeks ago, the nails were removed by a medical gentleman, and the parts of the new nails which appear at present, are more a source of irritation than any thing else; they have also a black unhealthy appearance. The great toe, and two toes next to it, of the left foot and the great and little toes of the right foot, are much swollen, of a dark purple colour, approaching in appearance to that of mortified parts. A considerable quantity of fœtid sanious matter exudes from the points of the nails, from between the toes, and from the outer side of the right foot, which has gone into a state of ulceration. Apply a bread and water poultice, and take a senna draught.

29. Apply pulv. hyd. nit. oxyd. to the ulcerated and inflamed parts of the toes, and afterwards the poultice.

April 1. There is already a decided improvement in the condition of the limbs. Continue.

15. All inflammation and irritation have disappeared; still, however, the parts of the new nails remain, which must evidently come away before the cure is complete. A slight discharge continues from the diminished ulcerated opening on the side of the foot. Made an out-patient.

LACERATION, AND AMPUTATION OF THE ARM.

Thomas Blackberry, ætat. 13, was admitted on the 16th, into the hospital under the care of Mr. Lawrence. A short time previously, while engaged in working at a carding machine called a *devil*, the left hand was caught by some of the teeth, and drawn into the machine, lacerating and shattering it in such a manner, as to render immediate amputation indispensable. The boy was carried into the operating theare, and Mr. Lawrence performed the circular operation, at nearly the middle of the forearm.

DISEASED KNEE — AMPUTATION OF THE LEG.

James Bow, ætat. 6, was admitted into the Hospital, as long ago as August, 1823,

under the care of Mr. Earle, with disease of the left knee. Since his first admission, he left the Hospital, but in a very short time was brought back, under Mr. Earle's care. The knee-joint continued in an enlarged state, and has for a long time discharged a considerable quantity of pus, through an opening a little below the patella. On Saturday, Mr. Earle removed the limb, at the lower third of the thigh by the circular cut. Mr. Lloyd compressed the femoral artery with his thumb. After the patient was removed to bed, the operator, for the instruction of the spectators, had the joint laid open, when it was ascertained, that partial dislocation had existed. Extensive ulceration of various parts. The cartilage of the under part of the patella, completely destroyed by that process. A section of the condyles, showed the bone to be extremely vascular, and so soft, as to yield to the pressure of the thumb nail. These morbid appearances, satisfied the operator that nothing short of amputation, could have been expected to save life. Unfortunately, a part of the ulcerative process extended beyond the parts removed, but this Mr. Earle confidently hoped would not obstruct the cure, as he recollected instances in which ulcerated sacs of the soft parts had been cut through in similar operations, where the most satisfactory recoveries had taken place.

ST. THOMAS'S HOSPITAL.

ANOMALOUS CASE.

Amenorrhœa—hysteria—erysipelas.

Elizabeth Walker, ætatis 24, admitted on the 19th of February, under the care of Dr. Elliotson. Says she has been ill eleven months, ever since her confinement for her first and only child; complains of great weakness in the loins; her legs always feel cold, benumbed, and drag and give way under her. Has frequently a creeping sensation, which begins in the left cheek, runs up to the eye, and down the face, through the left arm to the fingers. This resembles scalding in the face, and is seemingly attended by great heat of the part, but in the neck and arms by a sensation of numbness and cold. Extreme vertigo; great pain and sense of weight about the lower part of the forehead and the vertex; feels drowsy, and has frequently double vision in the course of the day, objects appearing one over the other; this occurs especially after exertion. She generally feels pretty well when she first gets up of a morning, but giddiness, &c., is immediately produced by exercise; has occasional fits of hysteria; her memory much impaired; the pupils are dilated eyelids droop, can roll the eye upwards and to either side. Has never menstruated since her first attack; pulse 100, soft, and rather full; tongue slightly coated; bowels costive, and cannot retain her urine when desire begins. Says she has been bled twice without finding any relief from it.

Ordered, the head to be shaved; to be cupped in the nape of the neck to ʒviij. and in the loins to ʒviij.; a powder of jalap, with calomel, half a drachm daily; milk diet.

20. Bowels moved once; face flushed; head but little relieved; pulse 76.

21. Complains of excessive pain in the epigastric region, and of sickness after swallowing any thing; feet give way under her if she attempts to stand; face flushed; pulse soft; bowels have been freely evacuated.

Ten leeches to be applied to the epigastrium and ten to the temples.

22. Occasional slight rigours, and feels always feverish towards the afternoon; pain in epigastric region not relieved. Has been attempting to read, but is unable to distinguish the words. Bowels not opened since yesterday.

23. Sat up for a few minutes this morning, since which has had severe headach; eyelids swollen and drooping; face flushed; tongue rather white; bowels moved once.

24. Pulse 96, full; sight still confused; some pain at the back part of the head; but feels better on the whole.

Continue the powder and the house medicine, if required.

25. Severe headach; pulse full; bowels open.

27. Complains of pain in the region of the heart; pulse 104; bowels open; venesection to fourteen ounces.

28. Blood firmly buffed; less headach and pain in side; pulse 93, soft.

March 2. Bowels much relaxed, and griped, but says she is better; tongue moist.

3. Bowels less purged; wishes for change of diet; beef tea.

5. Sight improved; slight pain in the side.

6. Hysterical, with headach, and pain in the side after getting up this morning; bowels relaxed. Twenty leeches to the side.

7. Pain somewhat mitigated; pulse 76, soft, rather full. The leeches to be repeated.

9. No headach or pain in side; sight much improved, but cannot read long together. Bowels open; experiences pain on passing her water.

10. Pain on pressure of the abdomen; tongue white; pulse 100. Apply 20 leeches to the painful part, and to be repeated on the 12th.

11. Not so much tenderness of abdomen. Micturition still painful.

13. Headach; spasm about lower part of the abdomen. Continue the powder daily.

14. Pulse sharp and frequent; headach and vertigo. Let 12 leeches be applied to the temples, and 12 to lower part of abdomen, and repeat them on the 16th.

16. Face flushed; bowels open; pain at the epigastric region.

18. No material alteration.

20. An erysipelatous blush has appeared during the night on the right cheek; headach and pain in the stomach, with vomiting; pulse 124; tongue brown. Ordered to be bled to twelve ounces. A cold application to be constantly applied to the face. Twenty leeches to the epigastric region, and afterwards a blister, and a blister to the occiput.

21. Pain not relieved; bowels open; vomiting; tongue coated; the mucous rattle distinctly heard all over the right lung, and the patient makes a wheezing noise on inspiration; pulse frequent, but not full; ten leeches to the epigastrium, and ten to the temples.

22. Breathing short, but less difficult. The erysipelas has extended to the left cheek; tenderness of the whole abdomen; tongue coated; pulse quick and sharp; fifteen leeches to the abdomen, and fifteen to the chest; castor oil, half an ounce, immediately, and a common enema, as occasion may require.

23. Says she is free from pain, but shrinks on pressure of the abdomen; bowels open; pulse 128, small; redness not so intense, but has extended to the forehead. Appears very low, and unwilling to talk; lying with her eyes closed; sixteen leeches to the temples.

24. Pulse 132; tongue coated; bowels open; redness less, but spread to the chin. Has a slight cough, causing pain at stomach; apply twelve leeches.

26. The redness of the face continues to decrease, and has not spread any further; still has pain on coughing, or breathing deeply; pulse 116; a blister to the chest.

Quin., five grains, every six hours.

27. The cuticle on the face is coming off in scales; complains of noise in the ears and deafness, with some difficulty of breathing; bowels open.

Hydrocyanic acid, one minim every six hours;

Sago and syrup.

28. Bowels not open since yesterday; tongue brown in the middle, but clean at the edges; seems rather better.

31. Much better; pulse 120; bowels regular; continue the sulphate of quinine; discontinue the hydrocyanic acid.

April 6. Continues to improve.

13. Has been going on well; is free from pain; sight good, and is gaining strength.

HOPITAL NECKER.

ENCYSTED TUMOUR IN THE ANTERIOR MEDIASTINUM, COMMUNICATING WITH THE CAVITY OF THE PERICARDIUM.

Charles Massard, ætat. 39, of a strong constitution, was, on the 16th of February, admitted under the care of M. Honoré. He stated that, during the last three years, he had been subject to transient pain in the right side, which had lately increased in intensity, and been accompanied by dry cough, difficulty of breathing, and general debility, so that he was obliged to give up his work. On his admission into the hospital, he complained of constant oppressive pain in the right lower part of the chest, troublesome dry cough, quick laborious respiration, and inability of lying on the left side; the chest was evidently enlarged on the right side, where the respiratory sound was only heard at the upper part; the greater portion of the right lung was impervious to air, as was also shown by the dull sound on percussion below the fourth rib of the right side. The heart was pushed towards the left side, as appeared from its impulse being strongest at a distance of three inches from the left margin of the sternum; its pulsation was faint, but distinctly heard over the sternum and the right side of the chest, especially at its lower part. Although the patient complained of extreme debility, he was not visibly emaciated; digestion was undisturbed, and there was only a slight febrile excitement in the evening. He was ordered mercurial frictions and blisters over the right side, but which, as well as slight aperients, afforded no relief; and, at the end of March, the pain in the chest had evidently increased, respiration had become more difficult, and the fever had assumed a decided hectic character. In the night of the 30th of March, he suddenly started up in his sleep; respiration was very hurried and laborious, he seemed to be in an extreme agitation, and complained of excessive pain over the lower part of the chest; the pulsations of the heart, although very weak and irregular, were perceptible over a large surface, and a clear sound was heard in the

region of the heart, which was renewed on every inspiration, and resembled that of tearing dry paper; the patient's countenance was remarkably altered, the pulse small, extremities cold, &c., and he died the next morning.

Inspectio Cadaveris.

On dividing the left intercostal cartilages, a great quantity of clear fluid escaped from the chest; and, on closer inspection, it was found that the scalpel had penetrated the pericardium, which, although considerably distended by the fluid, was found perfectly healthy; the anterior mediastinum, the greater portion of the right, and part of the left side of the chest, were occupied by a large encysted hydatic tumour, of the size of a child's head, which had forcibly compressed the right lung, and pushed the heart towards the left side. Its parietes were not above a line in thickness, whitish and soft, and without any appearance of fibrous structure; the external surface was smooth, and very loosely adherent to the surrounding cellular tissue; the internal was uneven from laminæ of cellular substance; the sac was not, however, divided into several cells, but exhibited one large cavity; its fluid was inodorous, of a yellow colour, and perfectly corresponding with that of the pericardium, which, in fact, communicated by means of an apparently recent aperture with the cavity of the encysted tumour. The right lung, although extremely compressed, was of healthy structure, and permeable to air; the left lung and the heart were not diseased.—*Journ. Hebdomad.*

HOTEL DIEU.

CARCINOMATOUS TUMOUR IN THE BLADDER.

An elderly woman, who was affected with prolapsus uteri and dysuria, died with the symptoms of violent cystitis. On examination of the body, the cavity of the bladder was found almost entirely filled by an oval tumour of the size of a turkey's egg, and of carcinomatous appearance, which adhered by means of a thin pedicle to the posterior parietes of the bladder, the internal surface of which was greatly inflamed. M. Dupuytren observed, that if the presence of the tumour had been ascertained during life, he would not have hesitated to make an attempt to remove it by cystotomy.—*Lancette Française.*

BREACH OF FAITH WITH HOSPITAL APPRENTICES.

To the Editor of The Lancet.

Sir,—What is your opinion of an apothecary who, *before* the indentures were signed, promised that his apprentices should have an opportunity of attending the Physicians' hospital practice, lectures, &c. &c., and who, *after* the indentures are signed, refuses them that privilege?

I am, your obedient servant,

An Apothecary's Apprentice.

St. Thomas's Hospital,
April 15, 1829.

TO THE READERS OF THE LANCET.

Many *complaints* having reached us relative to the *irregular delivery* of this work, we can only say, that if orders be transmitted to our office they shall be immediately placed in the hands of *Newsmen* for whose dispatch and punctuality we pledge ourselves. The Lancet may be in the possession of every Practitioner, within the Two-penny Post District, by eight o'clock on Saturday morning.

TO CORRESPONDENTS.

Communications received from, Verax—Mr. Thomas Warner—A Juvenile Subscriber—A Native of Kent—J. B.—Mr. James Craig—Mr. S. G. Evans—Medicus—Zeta—A Constant Reader—Mr. Melton—Dr. Harrison.

G.H.E. must send us his name. We never publish unauthenticated cases.

Other Correspondents next week.

Dr. James Clark has in the press, an Essay on the Influence of Climate, on Diseases of the Chest, Digestive Organs, &c., including Directions to Invalids going Abroad, respecting the best seasons and modes of Travelling, and the General Management of their Health; and remarks on the Effects of the Principal Mineral Waters of the Continent in Chronic Diseases.

ERRATA.

Page 2, line 40, for "pass" read "press."

Page 5, after the words "full-sized valvular" insert "opening. In the healthy heart, the diameter of the valvular" then read on "communication, &c."

Page 35, line 14, for "flow" read "blow."